



A taste of the late '40s through the early '60s found in amateur stereo slides

















by Mark Willke

The Uptown Drug Store

aron Warner of Michigan sent a set of six Realist format slides (in gray Kodak mounts with red edges) that were all taken the day after Christmas, December 26, 1953. They are all labeled with that date and the notation "Uptown Drug, St. Joe, Mich". He explains that they were found on eBay some years ago, but came with no other information.

Several of these images contained extended areas of blank ceiling, so a bit of careful cropping allows reproduction of more views that what will usually fit on this page. I particulary enjoyed the view of the camera department with its helpful clerk, but Aaron's favorite is the lunch counter with its bashful patrons!

Sadly, a quick look online shows that the building may now be an AT&T store, so I don't think the Uptown Drug Store still exists.

This column combines a love of stereo photography with a fondness for 1950s-era styling, design and decor by sharing amateur stereo slides shot in the "golden age" of the Stereo Realist—the late 1940s through the early 1960s. From clothing and hairstyles to home decor to modes of transportation, these frozen moments of time show what things were really like in the middle of the twentieth century.

If you've found a classic '50s-era image that you would like to share through this column, please send the actual slide or a high-resolution side-by-side scan as a jpeg, tiff or photoshop file to: Fifties Flavored Finds, 5610 SE 71st, Portland, OR 97206. You can also email the digital file to strwld@eleport.com. If the subject, date, location, photographer or other details about your image are known, please include that information as well.

As space allows, we will select a couple of images to reproduce in each issue. This is not a contest—just a place to share and enjoy. Slides will be returned within 6 to 14 weeks, and while we'll treat your slide as carefully as our own, Stereo World and the NSA assume no responsibility for its safety.



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(Classified, display and insert ads)
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Stereo World on the Web

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Front Cover:

Watkins' Pacific Coast No. 807, "Agasiz Rock, Union Pt., Yosemite." Even the name of this unique rock played a key role in 19th century disputes over the geologic role of glaciers in the Yosemite valley. Voluminous details and the contributions of several leading western stereographers, can be found in Paul Hickman's feature "Mount Lyell in the High Sierra."

Back Cover:

A tour visits the Gyeongju World Culture Expo Park's VR display during the 2015 ISU World Congress in Busan, South Korea. See "3D Busan" by Lawrence Kaufman. (Stereo by David Kuntz)



The National Stereoscopic Association

is a non-profit organization whose goals are to promote research, collection and use of vintage and contemporary stereoviews, stereo cameras and equipment, and related materials; to promote the practice of stereo photography; to encourage the use of stereoscopy in the fields of visual arts and technology; to foster the appreciation of the stereograph as a visual historical record.

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Annual membership dues (six issues): \$32 third class US, \$44 first class US, \$44 all international memberships. New members receive a plastic lorgnette viewer. *Member, International Stereoscopic Union*

So, How Many Views of That Rock Do You Need?

The publication of our feature "Mount Lyell in the High Sierra" actually has nothing to with the fact that somebody named John Dennis is mentioned as part of an 1871 photographic expedition into Yosemite's high country with J.J. Reilly and John Muir! In fact, publishing detailed and academically rigorous research like this work by

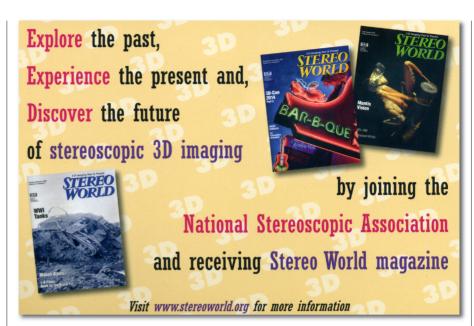
Comments and Observations by John Dennis

Paul Hickman helps solidify the place of stereographs in the often very conservative world of art history, of which he is a professor at Arkansas State University. Comparing stereos of Agassiz Column by the likes of M. M. Hazeltine, J. J. Reilly, C. E. Watkins, George Fiske, Muybridge, etc. as well as names and descriptions later applied by various publishers of their images helps illuminate the historic debate over Yosemite's glaciers—especially interesting now as they recede into oblivion.

Not everyone finds articles of this length and detail interesting, and it has been years since we have found space to include one of Paul's articles in Stereo World. This kind of article isn't easily cut without degrading the academic significance that distinguishes it, but it is the sort of material that could be published on the NSA website, awaiting only more help with the hours of scanning, text work and organization time required. (Just let us know!)

The sharp peaks above the Lyell Glacier seen in the article's 1871 Hazeltine/Kilburn view No. 971, "Sierra Nevada Mountains, California" appear also in an 1883 panorama photo by Israel Russell on the front page of the October 18, 2015 San Francisco Chronicle. Directly below that is a 2015 panorama by Keenen Takahashi of the same scene, in

If you have comments or questions for the editor concerning any stereo-related matter appearing (or missing) in the pages of Stereo World, please write to John Dennis, Stereo World Editorial Office, 5610 SE 71st Ave., Portland, OR 97206.



which the glacier ice in the view has receded to just the patch visible between the top peaks.

New NSA Post Cards!

You can help find new members for the NSA by spreading word with glossy new 2-sided membership cards. Thanks to David Kuntz and Lawrence Kaufman, colorful NSA

promotional cards for potential new members are available to any member willing to help. They're perfect for mailings, photographica or antique shows, 3-D product displays or anyplace you notice people with two eyes gathering. If you can use some, contact us at strwld@teleport.com. ***

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The Stringbag Answer

ravo to Hank Caruso for pointing out the true origin of the term "Stringbag" in reference to the British Swordfish torpedo bomber of WWII [Vol. 41 No.2, page 3]. I had originally been a bit nervous about doing the Luftwaffe articles since aviation is a bit outside my line—naval history being more my area of expertise. I originally acquired the Fliegen und Siegen book set almost by accident many years ago at one of the semi-annual photo shows Rusty Norton used to run in the DC area.

where it was being offered by a dealer together with the Kriegsmarine setwhich was the

etters

Readers' Comments and Questions

one I really wanted. Anyway, I bought both and eventually, given both the Luftwaffe set's rarity and the great popularity of aviation views among collectors in general, figured I should tackle the project.

As an author, one is used to (and hopefully grateful for) the occasional correction pointed out by sharp-eved readers. More to the point, Hank's comments are an excellent example of what truly constructive criticism is all about—not only pointing out a significant error but adding a new and entertaining piece to the discussion. Well done.

-Richard C. Ryder

3-D Stooges?

I recently came across a copy of Moe Howard's autobiography "Moe Howard & The 3 Stooges", which was apparently published by his estate in 1977, a couple years after his death. I'll admit to watching and enjoying the Three Stooges as I was growing up, so I couldn't resist buying the book. Moe's recollections are accompanied by many interesting photos, but perhaps none so interesting to a 3-D enthusiast as the one of Moe and his wife on page 106, which has the caption "Helen and Moe with Morton Downey's Coca-Cola tour." but no information about the location of the photo or the date it was taken.

I've collected and used enough Stereo Realist cameras over the years to instantly recognize the one being held by Moe in the photo, even if it is still enclosed in it's leather

eveready case. I also have seen numerous ads run by the David White Company (later Realist, Inc.) in which various celebrities endorsed and praised the camera and it's stereo slides, but I don't ever remember seeing such an ad or endorsement from Moe Howard.

It makes me wonder if he was given the camera by the manufacturer but never finalized a deal to appear in an ad for it, or if he may have purchased it on his own due to a personal interest in 3-D. (Perhaps he was bitten by the 3-D bug when a

> couple of the Three Stooges films were made in 3-D?)

> And of course. the next question would be.

have any of Moe's Realist images survived? I would love to see his behind the scenes stereo slides, which I'm guessing would have included the other Stooges (either on or off the set) as well as family and travel scenes.

Is anyone aware of any details of Moe Howard's interest in 3-D. or his use of a Stereo Realist camera? Did he ever appear in an ad for the David White Company? And does anyone know if any of his slides still exist, perhaps accessible in some museum or archives?

-Mark A. Willke





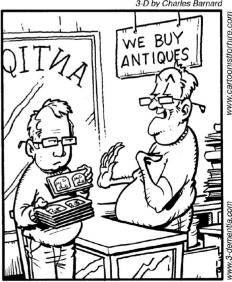
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GONE MADDD



"I'M NOT PICKY, I JUST HAPPEN TO ONLY COLLECT PRE-CIVIL WAR ERA POSED INTERIOR FLORAL TABLE CENTERPIECE ARRANGEMENT STEREOVIEWS SHOT IN NATURAL LIGHT, THAT'S ALL."

by AARON WARNER 3-D by Charles Barnard



"I'M NOT PICKY, I JUST HAPPEN TO ONLY COLLECT PRE-CIVIL WAR ERA POSED INTERIOR FLORAL TABLE CENTERPIECE ARRANGEMENT STEREOVIEWS SHOT IN NATURAL LIGHT, THAT'S ALL.



very two years, the International Stereoscopic Union (ISU) organizes an International Congress for 3-D enthusiasts and professionals. The ISU congress is typically a one week event with hundreds of participants from dozens of countries. The congress is much like the National Stereoscopic Association's 3D-Con, but with more of an International flair. During the congress there are many 3-D projection blocks, trade tables, exhibitions, workshops and many excursions. It's the ultimate way to meet friends and other 3-D enthusiasts from all over the world. Each ISU Congress has it's own endearing memories and this year was certainly no different.

Banner at the Busan Cinema Center. (Photo by Lawrence Kaufman)

The ISU held their 20th Congress October 5th through October 11th. 2015 in Busan, South Korea, The congress coincided with the two-day 7th 3D Korea International Film Festival (KIFF,) which was included in the congress registration. Past congress locations are listed online at: stereoscopy.com/isu/congress.html, so you can see what locations you have missed. Some have links to pages with impressions from these congresses and most have been covered in Stereo World over the years. Check out this year's photos on the photo link on the congress website at

I would like to congratulate the Korean group for producing such an enjoyable Congress. It was a true pleasure for many to enjoy the 7th 3D KIFF prior to the official start of the congress. The opening and closing gala dinners were included in the registration fee and the lunches were included with the outings and all the meals were truly incredible. The people and sites of South Korea are very memorable. South Korea is a modern, clean and safe country. Without exception the cities were immaculate and surprisingly free of trash and graffiti. Many of the congress attendees traveled in groups or





Attendants handed you 3-D glasses as you entered the congress projection inside the Haneulyeon theater on the second floor of the Cine Mountain building. Lumieres Cafe down the stairs from the theater had free coffee for the attendees and was a perfect spot to meet others before and between projection blocks.

(Stereo by Lawrence Kaufman)





A small part of Jagalchi Market, Korea's largest seafood market. The market is famous throughout the country. You can see women selling all types of fish, including mackerel, sea squirts and whale meat on wooden boxes along the road.

(Stereo by Lawrence Kaufman)

3-D Busan **The 2015 ISU World Congress**

by Lawrence Kaufman

individually to see the rest of South Korea, Japan and other Asian stops, either prior to or after the congress. The Stereo Club Tokyo even invited attendees to join them at their meeting on the Saturday following the congress. Understandably the attendance at the congress was only just over a hundred, which is less than half of the previous congress. Since we were so close to Japan, I expected to see lifetime ISU member and creator of StereoPhoto Maker (SPM) Masuji Suto at the congress. But I learned during the congress that Masuji had gone to London, where the Royal Photographic Society (RPS) was awarding him the Saxby award for achievement in the field of threedimensional imaging (SW Vol. 41 No. 3 page 29). Those not there truly

missed out on all the usual projections, trade tables, workshops, meetings, and most importantly talking and sharing with the other attendees. But this year, they also missed several interesting and photographic Korean Cultural shows.

During the two events, we saw over a hundred 3-D shows, well over twenty-two hours of programs in seventeen blocks of projection in a six day period. You can imagine how many wonderful shows we saw and many of them won awards.

ISU award winners:

Third place prizes: "The Next Day We Get Paid" by Barry Rothstien, "Birds of Paradise" by Siegfried Hartmenn and "Being Nowhere" by Christopher Schneberger.

Second place prizes: "Dallol & Erte Ale, Two Volcanoes in Ethiopia" by Pierre Meindre and "We Photograph to Remember 3.11" by Hiroyuki Nakamura.

First Place prizes: "Hyperlapse – Scenic in Japan #1" by Takashi Sekitani and "Life is (Not) All Roses and Honey" by Verena & Günter Peschke.

7th 3D KIFF winners:

3D KIFF Jury Prizes: "City Kay Live" and "The Shoot"

3DFIA Chairman's Prize: "Change Zoororing"

3D Special Prize: "Galapagos 3D: Nature's Wonderland" and "Riga-2041"

3D KIFF Contribution award: "Kim Jong

Best 3D prize: "The Insect Kingdom 3D" Technical Grand prize: "Das Leben ist (k)ein Honigschlecken" (Life is (Not) All Roses and Honey)

An ISU tour visits the Gyeongju World Culture Expo Park. The display itself was called the "3D Virtual Reality Tour of Seokguram using HMD Technology." (Stereo by David Kuntz)





The final Cultural event was themed "A Beautiful Nation" and focused on traditional orchestral music with several groups performing. (Stereo by Lawrence Kaufman)









Attendees take a short photo break on their 108 step journey, to view the Haedong Yonggungsa Temple and the coastline. Unlike most Buddhist temples in Korea, it is situated on the coast of the northeastern portion of Busan. (Stereo by Lawrence Kaufman)





ISU members take advantage of a photo opportunity at Haedong Yonggungsa Temple.
(Stereo by Max Pow)





Congress attendee Job Van de Groep from the Netherlands was recruited as a model during the Barry Rothstein "Photographic Phantogram Headshots" workshop. Barry brought his phantogram headshot table with him to South Korea The table folds in half, so it travels well; so well Barry carried it throughout Japan for another week.

(Stereo by Cassie Kaufman)

Short Film, Best Pictures: "KUKU" and "The Last Day on Earth"
Feature Film, Best Pictures: "On a Long Breath" and "Unforgettable"
Grand Prize, Short Film: "Waterside"
Grand Prize, Feature Film: "Underdogs Kids 3D"

The Venue

The Busan Cinema Center was opened on September 29, 2011, during the sixteenth edition of the Busan Film Festival (BIFF.) From an architectural perspective, the center is an historic work that exhibits a sense of formative beauty. The center's Big Roof holds the Guinness World Record of being the largest cantilever roof in the world (2.6 times larger than a soccer field) and comes complete with 42,600 LED lights, which help create an unforgettable scene along the Suyeong

River and Naru Park. The dynamic LED lighting surface covering the undulating ceilings of the outdoor roof canopies makes the Busan Cinema Center a true wonder to enjoy. Artistic lighting programs tailored to events of the BIFF or the Municipality of Busan can be created by visual artists and displayed across the ceiling in full motion graphics, creating a lively urban play area at night. The Cinema Center consists of three buildings: Cine Mountain. Biff Hill. and Double Cone. The main building Cine Mountain has three theaters for screening movies and one performing arts theater called the Haneulyeon, which can feature the world's best stage performances. The Haneulyeon theatre is where all the projections took place.

Tours

As mentioned previously, the outings included buffet lunches with not only fabulous spreads of delicious dining, but also great photo locations. Most Buddhist temples in Korea are traditionally located in picturesque mountains. HaedongYonggungsa Temple is situated on the coast of the north-eastern portion of Busan It was first built in 1376 by the great Buddhist teacher known as Naong during the Goryeo Dynasty. The name of the temple means "Palace of the Dragon in the East of the Sea." As the name implies, the temple is stunningly located by the seashore. The way to the temple is awesome, with a 108 step staircase. It features a Daeungjeon prayer hall, a 33 foot high Haesu Gwaneum Daebul (statue of the seaside Goddess

Buddha), a mineral spring and a three-story pagoda with four lions all looking out over the ocean. We also visited the sandy seashore of Songjeong Beach on this outing.

Following a walking tour of Igidae Park we enjoyed breathtaking views of Busan Gwangandaegyo Bridge, stretching over 4.5 miles, the largest bridge over the ocean in Korea. Igidae Park's coastal walking path goes to Orvukdo Island, but I don't believe anyone walked that far. The U-shaped Sky Walk is almost 30 feet in length, floating about 131 feet above the surface of the sea and offers a unique aerial experience. On the walkway, there are plenty of clean stairs, naturally-integrated benches and frightening-to-some suspension bridges overhanging small, very picturesque cliffs. We were surrounded by exceptionally beautiful greenery the entire time.

Taejongdae Resort Park is designated a Busan monument and along with Orvukdo Island is among the most beautiful places around Busan. It is especially famous for its rock beach. With its highest peak at 820 feet, there are forests of pine trees plus 200 other varieties of trees. Taejongdae was named after the 29th king of the Silla Kingdom (57 BC -935 AD), King Taejong Muyeol (604-661). Under the impressive lighthouse of this resort is a rock called Sinseon Rock, named after the myth that gods and goddesses came down here to relax. On clear days you can see Japan's Tsushima Island from the observatory. We also visited the Jagalchi Market. Korea's largest seafood market. The market is famous throughout the country and was very crowded. We saw women selling all types of fish, including mackerel, sea squirts and whale meat on wooden boxes along the road.

Our full day tour was to Gyeongiu. situated in the southeastern part of Korea. Gyeongju in Gyeongsangbukdo Provinceis is about a two hour ride from Busan. This beautiful City was the capital of the Silla Kingdom which ruled for over 992 years, the longest period of any dynasty in the history of Korea. Over the course of almost a thousand years, Silla transformed itself from a small tribal nation to a kingdom occupying more than half of the Korean Peninsula. During that time, Gyeongju steadfastly remained its capital. Buddhism, which the Silla Kingdom adopted in the 6th century, helped strengthen the royal power and unite the people. The Buddhist religion also left fascinating cultural heritages and relics. The famous Bulguksa Temple and Seokguram Grotto are major historical sites in Gyeongju.

(Continued on page 10)

Igidae Park's coastal walking path crosses one of the picturesque suspension bridges at left above the rocky shore and crashing surf. At right rear is the Gwangandaegyo Bridge stretching over 4.5 miles back to Busan. Above the surrounding greenery is the glass building that housed the buffet lunch with wonderful views of all the scenery. (Stereo by Lawrence Kaufman)





The picturesque Anapji Pond (Imhaejeonji) was built in 674 by King Munmu (the king responsible for unifying the Shilla, Koguryo, and Paekche kingdoms) as a magnificent pleasure garden. He designed the pond so that one cannot view the entire pond at once. (Stereo by Lawrence Kaufman)





Hiroyuki Nakamura and others photograph flowers on the outing to Gyeongju. (Stereo by David Kuntz)





12th Annual LA 3-D Movie Festival

by Eric Kurland

SPACE, Stereo Sisters, and the LA 3-D Club co-presented the 12th Annual LA 3-D Movie Festival on Dec 12th-13th, 2015 at the Downtown Independent theater in Los Angeles. The festival's mission is to showcase the best independent stereoscopic 3-D filmmaking from around the world. The festival featured over 30 independent 3-D short films, 14 student produced films, 5 stereoscopic feature motion pictures, including the world theatrical premiere of the 3-D Film Archive's digital restoration of the 1954 war drama Dragonfly Squadron.

The festival opened on Saturday afternoon with the LA 3-D Club's presentation of the 56th Hollywood International Exhibition of Stereoscopic Photography. This PSA sanctioned exhibition featured both a stereo card and a digital photo section. Exhibition co-chair Philip Steinman reports that "Despite massive technological shifts that have changed the way that 3-D photographers acquire and display their images, I believe that the quantity and quality of images submitted to the Hollywood Exhibition demonstrate that 3-D photography is still very much alive and well."

The festival film programming immediately followed the exhibition, beginning with a screening of the WWI documentary Im Krieg (Inside the War) written and directed by Nikolai Vialkowitsch, which won the festival award for Best 3-D Feature. This German production utilized a treasure trove of over 20,000 photographs taken during WWI and unpublished for decades, to provide

the basis for the historical documentary which brings to the screen for the first time ever these 3-D pictures. These striking images are merged with quotes taken from diaries and letters telling of love and hate, brutal killing and deep friendship.

The first block of short films in competition included Robert Bloomberg's Hidden Stereo Treasures and Curvin Huber & Catriona Baker's Every Two Minutes (both of which premiered last year at 3D-Con in Utah). The program also featured the music videos The Next Day We Get Paid by Nathan Owen of the band Owenstone and The Trouble with Friends by Jeff Boller for his musical project The Simple Carnival. Rounding things out were Medallions for Bella, an abstract animation by David Turner, the first three episodes of Andrew Murchie's 3-D web series from the UK Crime Squad, and Dust to Ashes, a 20 minute excerpt from an upcoming feature documentary about the Burning Man festival.

Attendees enjoyed the LA 3-D Club's annual Holiday Party which was held in the lobby of the theater, and preceded the Centerpiece Screening of Dragonfly Squadron, an American 1954 Korean War film directed by Lesley Selander. It is set in the period shortly before and during the invasion of South Korea by North Korean troops. The film was originally intended to be released in 3-D, and was filmed in dual 35mm, but interest in 3-D films had greatly diminished toward the end of 1953. so when the film premiered in Los Angeles on January 27, 1954, and went into general release on March 21, 1954, only flat prints were

shown. The 3-D Film Archive acquired the rights in 2009 and began their preservation work just in time. The various stock shots used in the final battle scenes were deteriorating with vinegar syndrome and began to affect the surrounding footage as well. The 3-D world premiere of Dragonfly Squadron took place on September 14, 2013 in Hollywood at the World 3-D Film Expo. It was great to finally see it on the big screen but unfortunately, there were some problems with the presentation. Technical issues in the booth required the film to be shown in the aspect ratio of 1.37:1 and the intermission card was placed in the wrong spot. Timing was inconsistent between the left/right 35mm prints and an audio glitch caused the sound to run out of sync for nearly two minutes. In addition, the opening credits were flat due to a mislabeled element when the new prints were made. All of the problems have now been fixed in this stunning new 3-D restoration. Greg Kintz, Technical Director for the 3-D Film Archive, has meticulously restored this lost 3-D film in 4K from the original left/right 35mm elements. The timing between both eyes has been precisely matched; the Intermission card is in the correct place: the dynamic optical audio track has been fully restored and is in sync; the baked-in vertical alignment errors have been painstakingly corrected shot-by-shot; the opening titles are now fully three-dimensional and the film has been mastered in the correct aspect ratio of 1.66:1. The screening featured an introduction and Q&A with Bob Furmanek and Greg Kintz from the 3-D Film Archive. For a more comprehensive look at the production of the film, visit the 3-D Film Archive at www.3dfilmarchive.com.

The first day of the festival closed with a late night screening of the horror/thriller feature film *Julia X*, including an introduction and Q&A with director of photography/



Bob Furmanek (left) and Greg Kintz (right) presented the world theatrical premiere of the 3-D Film Archive's digital restoration of the 1954 war drama Dragonfly Squadron, including a question and answer session following the screening. Here with festival director Eric Kurland (center).



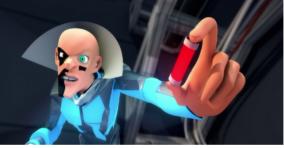


From Best 3-D Feature Award winner Im Krieg (Inside the War) written and directed by Nikolai Vialkowitsch.





From Valor Cat. recipient of this year's Ray Zone Award for Excellence in 3-DIY.





stereographer Jason Goodman, from 21st Century 3D, and lead actress Valerie Azlynn, who played the title character.

Day two of the festival began on Sunday afternoon with the 2nd Annual Student Film Block sponsored by the 3-D Women's Community, Stereo Sisters. This block provided a platform for 3-D educational programs around the globe to showcase their students' work. Comprised of shorts, music videos, commercials, animation, and experimental works, the hour long block highlighted emerging filmmakers and celebrated their visions. The goal was to create an outlet for novice stereo artists that encourages peer review and synergy with the 3-D community. The Stereo Sisters Golden Mirror Awards for Excellence in Student 3-D were awarded to a stereo pair of students from University of Texas Austin's UT3D program. Brenda Szwejbka's fantastical music video La Douleur Exquise explores the topic of unrequited love as experienced by a melancholy rabbit enamoured with a handsome fox. Set against a surreal backdrop comprised of everyday landscapes, but enhanced by abstracted perspectives, this delightful video features music also expertly written and performed by the filmmaker. Issac Cardenas' A Walk Down Memory Lane utilizes 1st person POV, single take perspective to place audience members into the filmmaker's childhood environment. As we explore the private world of a child's backyard, we share memories of his deceased father, now played out as black and white ghosts punctuating an otherwise colorful and eclectic, although abandoned, workshop. Selected from a field of over a dozen entries by a jury of 3-D educators, these two pieces demonstrated superlative use of 3-D by enhancing the story through adding depth, and executing stereoscopic principles with technical precision & artistic merit. Another student film, Valor

Cat by Ben Reicher, was the recipient of this year's Ray Zone Award for Excellence in 3-DIY. Named for festival co-founder Ray "3-D" Zone, who passed away in 2012, the award celebrates what Zone described as "fiercely independent do-it-vourself 3-D filmmaking." Valor Cat is a seven and a half minute superhero musical/opera/comedy. Reicher is an animation student at the California Institute of the Arts, and is responsible for all visuals in the film. He also wrote the screenplay and lyrics, constructed all CGI sets and characters, and performs the voice of the main character.

The second block of short films in competition featured How to Draw a Cat by Robert Bloomberg, episodes 4-6 of Andrew Murchie's Crime Squad, Benjamin Harley & Chisa Hidaka's underwater dance with dolphins, Amongst, the reverse motion video Magic Field by Masuji Suto, a music video for the Garbage song Happy When It Rains by Karel Bata, an





Jeff Boller, Simple Carnival musician/film-maker & Valerie Lettera-Spretzer, of DreamWorks Animation and a member of the special jury pose with the festival program during film blocks. (Stereo by Lawrence Kaufman)

experimental film by Sean Arden titled Transference, Ron Kriesel's View-Master 75th Anniversary Travelogue shot at the Oregon Caves where View-Master inventor William Gruber and Sawyer's president Harold Graves first met, and the award winner for Best Short Film, Carta De La Muerte A Frida (A Letter for Frida from Death), directed by Ana Leticia Reyes and co-directed by Diego Sandoval Espinoza. This short film from Mexico is an animated illustrated poem that evokes the relationship of Death in the life of Frida Kahlo, the wellknown Mexican artist (1907-1954) who lived a very dramatic life because of an accident she suffered in her youth. Death was always present in her thoughts and paintings, and this film illustrates the Mexican traditions she passionately embraced.

The festival continued with the premiere screening of the experimental film Windows by filmmaker and photographer Kevin Ford. Ford describes his film as a feature-length experimental art film which uses the Stereoscopic format to put viewers in the picture while juxtaposing nature and cities in the United States. The film has no narrative structure, and is meant to be meditative, combining beautiful imagery with an ambient drone musical score. The filmmaker joined the audience in a lively Q&A following the screening.

The LA 3-D Club in association with Unofficial Cardboard hosted an evening of virtual reality demos at the 12th Annual LA 3-D Movie Festival, featuring work from established studios and students. The presenters were Greg Katano from Unofficial Cardboard, Scott Conolly from The Astronauts Guild, Jonathan Yomayuza from Emblematic Group, Kevin Mack and Snow Mack from Shape Space VR. John Dewar from Studio Transcendent,

Steve Berezin from Berezin Stereo Photography Products and Cameron Feather and Dainius Bukauskas from CalARTS. The presenters shared their inspiration and processes in the creation of the bodies of work they exhibited. The semi formal gathering gave attendees and presenters a chance to share information and get inspired for future projects.

The final film of the festival was the feature romantic comedy adventure 40 Below and Falling from director Dylan Pearce. This Canadian production tells the story of a small town teacher, Kate Carter, going back to the city for her wedding. When a blizzard strikes, she is forced to travel with a stranger named Redford who leaves her questioning her future plans. The movie stars actress Jewel Staite, best known for her role on the TV series Firefly.

Awards were announced at the Closing Night Awards Ceremony on Sunday evening by LA 3-D Movie Festival director and 3-D SPACE executive director Eric Kurland, Stereo Sisters founder Shannon Benna, and LA 3-D Club president Shyam Kannapurakkaran. Top films were selected by audience ballot and by special jury. Award winners were presented with the traditional Ro-Man trophy of the LA 3-D Movie Festival, Stereo Sisters' Golden Mirror Trophy and an assortment of valuable prizes from festival sponsors Sony Creative Software and the London Stereoscopic Company.

Watch for a selection of the "Best of the Fest" at the 2016 3D-Con in Tulsa this summer!

3-D Busan (Continued from page 7)

In 1995, both became the first in Korea to be designated UNESCO World Cultural Heritage sites. We also visited Cheomseongdae, the oldest astronomical observatory in Asia. Today it may not be very impressive, but the observatory was necessary in the Silla period to aid in agriculture. The movement of stars was used to predict the fortune of the nation. The number of stones and floors of Cheomseongdae are symbolic of altitudes. The base is 17 ft wide and stands 31 ft tall. The 12 rectangular base stones are placed in a square, three on each side, representing the

four seasons and twelve months of each year. The 12 levels of stone to the window entrance and 12 tiers above the window opening also represent the 12 months of the year or the 12 signs of the zodiac. For over 2000 years, astronomers studied the movements of the stars and planets and charted them. They foreshadowed solar and lunar eclipses as well as the courses of comets. Court astrologers reported and interpreted their predictions to the King who would then act according to their predictions. The stars determined all aspects of policy making, agricultural

developments, celebrations, wars and other events and festivals. The picturesque Anapji Pond (Imhaejeonji) was built in 674 by King Munmu (the king responsible for unifying the Shilla, Koguryo, and Paekche kingdoms) as a magnificent pleasure garden. He designed the pond so that one cannot view the entire pond at once. Only a small portion of the original palace remains.

ISU Board

The ISU has a Board of Directors of six individuals, which changes every (Continued on next page)

eople tell me the *Unknowns* column used to be the first place they looked in each new issue of Stereo World. Although my first eight columns have produced some creative suggestions, there have been no answers unfortunately. And that leads to the painful question of how much has been lost. Are the Unknowns unique survivors with no other matching examples extant? It greves the heart to read some of the backlist labels of photographer's titles and imagine what marvels the stereoviews would show.

And so with no answers I have concluded it is time for something easier! I have seen two other copies of this

stereo but none with any identification. The scene

almost

Can You Identify the Subjects of these Views? by Russell Norton

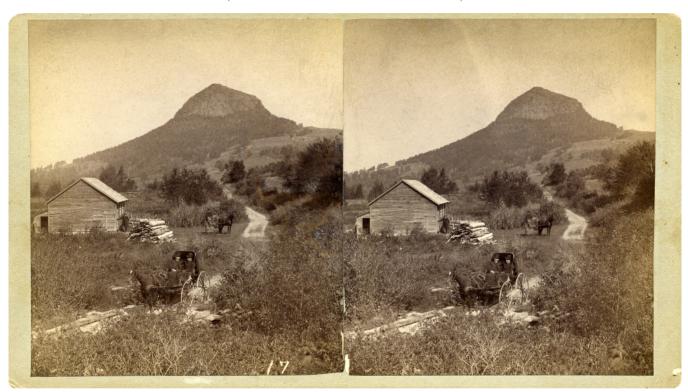
screams Colorado and there is even a number "17" in the negative. What more do you need? I have also seen this on an orange mount with arch

Can you identify this stereo? Please write, call, or email Russell Norton, PO Box 1070, New

cut halves. This will be easy, right?

Haven CT 06504 (203) 281-0066,

oldphoto9@earthlink.net. Your interesting and challenging Unknowns submissions and ideas are eagerly awaited.



$\textbf{3-D Busan} \hspace{0.2cm} \textit{(Continued from previous page)}$

two years at each biennial congress. In addition each country has a country rep who is responsible for collecting dues and promoting the organization. Plus each stereo club has a club rep who promotes the organization and represents that club on the ISU Council. The current ISU president is from the country which is hosting the upcoming congress; the ISU vice president is from the country which will host the following congress; the secretary and treasurer do not have to change every congress; the editor of ISU magazine, Stereoscopy and the next congress manager are both technically appointed offices and they round

out the ISU Board. During the 2015 Congress, the ISU Council approved some updates to the ISU by-laws, including daily operations, financials and involvement in future Congresses. Also under activities the Council added Special Interest groups. It is hoped that many who are involved in specific segments of 3-D can bring their interests to Stereoscopy magazine and join with others to advance their shared interests. I am also happy to report that the proposal for the German club Deutsche Gesellschaft für Stereoskopie e.V. (DGS) to host the 2019 ISU Congress in Lübeck Germany was unanimously approved.

The new ISU Board includes several

NSA members:

President: Lawrence Kaufman Vice President: Frank Lorenz Treasurer: Alexander Klein Secretary: Bob Aldridge

Stereoscopy Editor: David Kuntz Congress Manager: Steve Berezin

I am very proud to be elected with this great group of stereographers and stereophiles, the new board will be energetic and hardworking. Please feel free to contact any of us if you have any ideas to help improve our associations.

(Continued on page 29)

Mount Lyell in

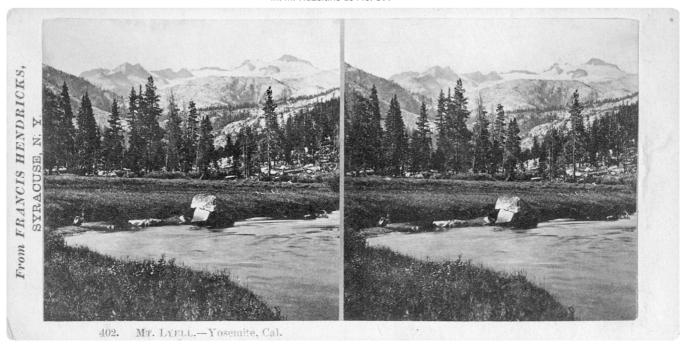
Controversy in Yosemite Valley: Whether Agassiz Column, the Magic

by Paul Hickman

Teveral months before John Muir discovered the Lyell Glacier, peripatetic photographer M. M. Hazeltine had taken an unnumbered sequence of five stereographs near the summit of Mount Lyell (Figs. 1-3). (All five views were subsumed under the printed titles.) Lacking any formal training in glaciology, Hazeltine may have assumed that he was photographing a compacted snow field as opposed to an actual, moving sheet of ice. In either case, whether the photographer's epiphany was a mountaintop experience, coming while he exposed or developed the latent image, or whether he was struck by it at some later date in the photographic medium's ongoing time frame for postvisualizing unsuspected natural phenomena, the realization or revelation did unquestionably come to Hazeltine that he had photographed a living glacier in the high Sierra. The fourth exposure in our sequencial record of the photographer's assault on the thirteen-thousand-foot mountain was also given the manuscript title "The Glacier on Mt .Lyell in August." Another manuscript title for another copy of the fourth exposure, "Mt. Lyell taken Aug. 15, 1871," suggests that Hazeltine had become aware of the date of Muir's "discovery." Why else would a professional

photographer assign an exact date to a landscape view that would otherwise be regarded as timeless in historical terms? "Mt. Lyell" is not a record of a freak summer snow storm, nor is there a single trace of man in it, aside from the implied presence of a hardy wet-plate cameraman. Perhaps Hazeltine recorded the date to establish priority before Muir, if not as an "ambitious amateur" glaciologist, than at least as an intrepid mountaineer of the Sierra Nevada. In any case, Hazeltine had unquestionably become aware of the existence

Fig. 1. Francis Hendricks,/ Syracuse, N. Y./ negative by M. M. Hazeltine. 402. "Mt. Lyell, Yosemite, Cal." Albumen print. Yellow and tan card. Collection of Paul and Kathy Hickman. Also published by S. S. Conner/ negative by M. M. Hazeltine as No. 402, by Kilburn Brothers/ negative by M. M. Hazeltine as No. 967, by no maker/ negative by M. M. Hazeltine as No. 402 and on the "Yosemite Valley,/ California" imprint/ negative by M. M. Hazeltine as No. 59.



the High Sierra

the Rock on Union Point Trail is Called Tower or Ten Pin Rock

© 2015 Paul Hickman

of a living glacier in Yosemite's high country.

He may have learned what he had photographed from Muir, who acquired a small collection of Hazeltine's Sierra Nevada stereographs, perhaps in 1871 or 1872, the final years that both men lived and worked in the Yosemite Valley together.

A photographic title of 1871 or 1872 demonstrates that Hazeltine accepted the existence of a living glacier in Yosemite's high country. On the other hand, at least three 1872 titles of another natural monument, "The Magic Tower," suggest that Hazeltine continued to reject the meaning that Muir attached to the existence of glaciers such as the one on Mount Lyell: inductive proof for the former existence of the glacier in the Yosemite Valley itself.

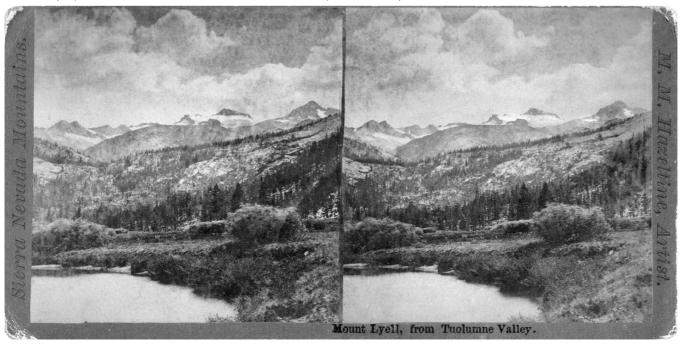
Hazeltine's view of the Lyell Glacier was published by a New Hampshire firm under the more generalized title of "Sierra Nevada Mountains" (Fig. 4). Separated by the

breadth of a continent from its cameramen and the geological debate that was raging in California, the White Mountain firm was oblivious to any significance that Hazeltine's titles might possess in the controversy over Yosemite's origin.

John Muir and M. M. Hazeltine

John Muir discovered an actual, living glacier on the northern slope of Mount Lyell in the autumn of 1871. The summer after his discovery Muir acknowledged the receipt of a book by Lyell, which was just the thing he had wanted, he said. Muir was the most uniformitarian of all the protagonists in the Yosemite controversy, and his discovery of living glaciers in the Sierra Nevada fur-

Fig. 2. Sierra Nevada Mountains./ M. M. Hazeltine, Artist. no number. "Mount Lyell, from Tuolumne Valley." Albumen print. Orange and lavender card. Collection of Paul and Kathy Hickman. Title of another copy in the same collection "Mount Lyell Aug. 15th, 1871." [manuscript] Also variant negative that was also published by J. W. & J. S. Moulton of Salem, MA as No. 27, by John S. Moulton alone of Salem, MA as No. 27, by Dodge, Collier & Perkins of Boson, MA, by James Matthews of Rochester, NY as No. 27, by H. Ropes and Company of New York, NY as No. 27 and on the "Yosemite Valley, California" imprint.



nished him with evidence for his premise that causes now in operation in the mountains above could explain the changes that had occurred in a different age in the vallevs below.

Now the world is so warm and the snow crop so scanty, nearly all the glaciers left alive have melted to mere hints of their former selves. The Lyell Glacier is now less than a mile long; yet, setting out from the frontal moraine, we may trace its former course on grooved and polished surfaces and by canyons and moraines a distance of more than forty miles.1

A Natural Monument in the Yosemite Valley

Prior to selecting glacial erratic as Agassiz's gravestone, prior to his death, and even prior to his visit to San Francisco, someone in Yosemite had already named a Natural monument—with a shape remarkably similar to his subsequent funerary monument—after the father of the ice age theory. Agassiz Column is a large, oblong, granitic boulder, thirty-eight feet in height by seven feet in diameter. Just below and to the west of Union Point, 2,335 feet above the floor of Yosemite Valley, the natural monolith stands on a crumbling base in a precarious state of equilibrium. The Column's prismatic, multifaceted form was determined by intersecting joint planes, vertical and oblique. At least one modern geologist believes the Column is the last

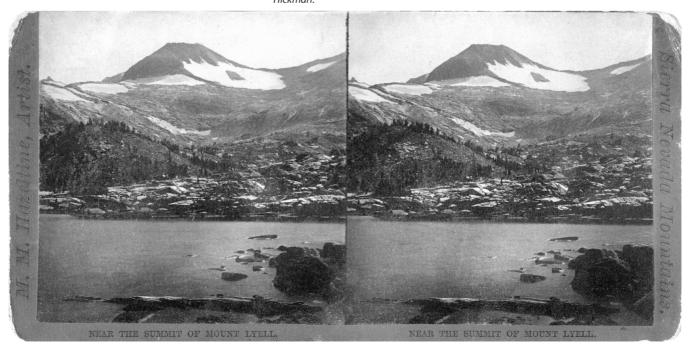
eroded remnant of a local rock mass once divided by many such fractures, but in the 1870s, at least one geologist and at least three photographers seem to have believed the balanced rock was an erratic boulder—quarried in the high Sierra, transported by the ancient Yosemite glacier, and deposited near Union Point.

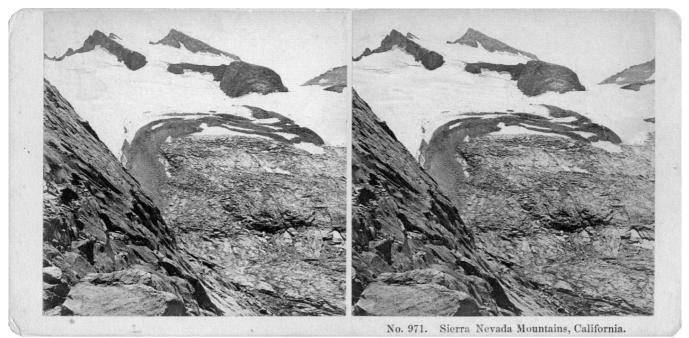
The Column became assessable in 1871-72, when John Conway built the Union Point Trail; its name had come into use not later than May 29, 1872, when a tourist recorded in her journal, "we set ourselves to studying a very extraordinary stone called Agassiz' Pillar."² Perhaps it was given its name by Muir, who supported himself part of the time as a trail guide. The zealous young disciple of Agassiz had a reputation for seizing every opportunity to preach the gospel of glaciers in Yosemite. The tourists and photographers that he guided up the trail to Glacier Point would have heard about the river of ice that had filled the Valley to its rim. Two-thirds of the vertical distance to the rim, a balanced rock perceived as a glacial erratic could be cited as physical evidence for Muir's theoretical conclusion, and naming the boulder after Agassiz, whose name was associated in the popular mind with the ice age theory, would have served as an entree for describing the Pleistocene age in the Sierra Nevada.

From the fragmentary geological record then available for easy inspection, erroneous beliefs about Agassiz Column could be reasonably induced. Several generations later, a peripatetic geomorphologist of the U. S. Geological Survey was able to offer a better-informed theory than our first working hypothesis, but for the intellectual historian of theology, science, or art, the ultimate truth or validity of a belief or hypothesis is not an issue of fundamental importance; intimating the ultimate winners and losers in the earlier geological debate is a matter of only secondary or even parenthetical interest. "At any given moment the accepted report of an event is of greater importance," concludes one social historian of photographic printmaking, "for what we think about and act upon is the symbolic report and not the concrete event itself."3 Interpreting the meaning of time-locked art is the primary concern of our cross-disciplinary, iconological study, and the task at hand is to discuss the langage and the langue of three place names, to assess the role that timelocked beliefs may have played in devising each of these names, and to speculate on the ultimate contextual meaning of topographical views by five principal photographers.

A fundamental distinction between two semiological sign systems was enunciated in the first

Fig. 3. M. M. Hazeltine, Artist./ Sierra Nevada Mountains. no number. "Near the Summit of Mount Lyell." Albumen print. Orange and lavender card. Collection of Paul and Kathy





decades of the twentieth century by an influential linguist in Frenchspeaking Switzerland, Ferdinand de Saussure: langue, the submerged context or matrix of conventional meanings of a particular time and place, determines what becomes manifested in *langage*, the domain of intentional linguistic acts. The act of naming is therefore best understood in the context of broader cultural or sociological values. "Iconology, like

Fig. 4. Photographed and Published by/ Kilburn Brothers, Littleton, N. H. (verso)/ negative by M. M. Hazeltine. 971. "Sierra Nevada Mountains, California." Albumen prints. Yellow and tan card. Also published by A. J. Fisher of New York, NY as No. 16, title: "The Glacier on Mt. Lyell in August." Collection of Paul and Kathy Hickman. Also variant negative: M. M. Hazeltine. 41. "Mt Lyell taken Aug. 15, 1871" (ms. ink, recto). International Museum of Photography at George Eastman House, Rochester, New York (acc. no. 81:7360:8) identical to Hazeltine, Bancroft Library, University of California at Berkeley (stereo no. 13,732).

early semiotics," writes art historiographer Michael Ann Holly, is a systematic methodology "devoted to exposing the existence of the conscious and unconscious rules of formation that encircle a language and

Fig. 5. Photographic Views/ of American Scenery./ J. J. Reilly,/ Yosemite Valley, Cal. no num-

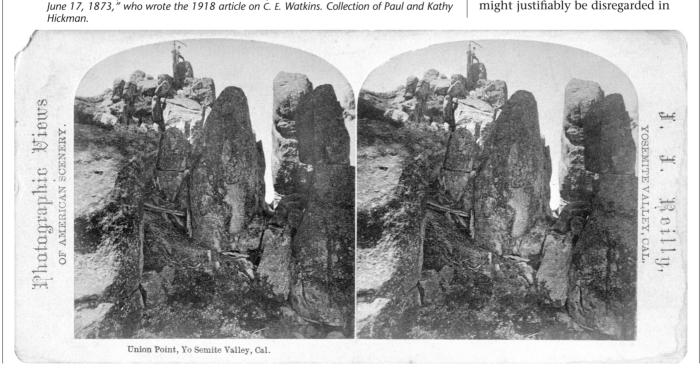
1876 Albumen prints. Yellow card. Another example of card # 456, verso: "Chas. B. Turrill,

ber [old series #456]. "Union Point, Yo Semite Valley, Cal." Verso: "Snow [Hotel], July 8,

make possible its sudden emergence-both visual and linguisticon the surface of human history."4

Agassiz Column, Magic Tower, or Ten-Pin Rock?

Agassiz Column went by a variety of names in the 1870s. The brief dispute between Yosemite's photographers over the rock's proper name might justifiably be disregarded in



the formal analysis, but in a search for contextual meaning, the titles of their views provide the art historian with the basis for an etymological, philogical, and semiological case study within his larger inquiry into the epistemological limits of his discipline and field of study.

A bitter and acrimonious dispute over the geological origins of Yosemite Valley was raging in the 1870s. Caught in a cross fire between three mudslinging geologists, three photographers who knew John Muir all chose to call the boulder in question Agassiz Column or Rock. The matter cannot be dismissed as mere coincidence or mindless repetition. Until a place name gains widespread acceptance, the cultural historian is obliged to reconstruct its sociological content and to infer meaning from its use.

Scottish and American Countrymen

Three future explorers of the Yosemite's high country were born in Scotland, of Highland blood, in the year 1838: John Muir, John James Reilly, and William Keith. Muir emigrated from the Old World to the New in 1849, Keith followed in 1850, and Reilly followed in 1856. Ten years later, in the first week of July, 1866, Keith became the first of the three to enter the Yosemite Valley. Muir followed in the third week of June, 1868, and Reilly followed in the fourth week of May, 1870.

On July 28th, 1871, Reilly exposed a negative from the summit of the extinct volcano near Mono Lake. Two days later, en route from Mono Lake to Yosemite Valley, the photographer halted near Nevada Fall; he was accompanied by a man named John Dennis and by his Scottish countryman, John Muir. A few weeks later, a country newspaper printed a report on the ramblings of the little party of mountaineers:

A party of three, Messrs. Reilly, Dennis and Muir, have just returned to Yo Semite from a three week's trip in the high Sierra east of the Valley and in the region of Mono Lake. Most of the first week was spent on the Hoffmann Range, northeast of the Valley, which was thoroughly explored and its principal points of interest photographed. The second week was spent about Lake Tenaya, Cathedral Valley and the Upper Tuolumne, and some of the rarest points of grandeur and beauty were admirably photographed by Mr. J.J. Reilly. The far-famed Bloody Canyon was next explored, and the broken volcanic cone south of Mono Lake, excellent pictures of which were obtained. Then the party returned here by the Little Yo Semite, highly pleased with their success. Prints from Mr. Reilly's negatives will soon appear.5

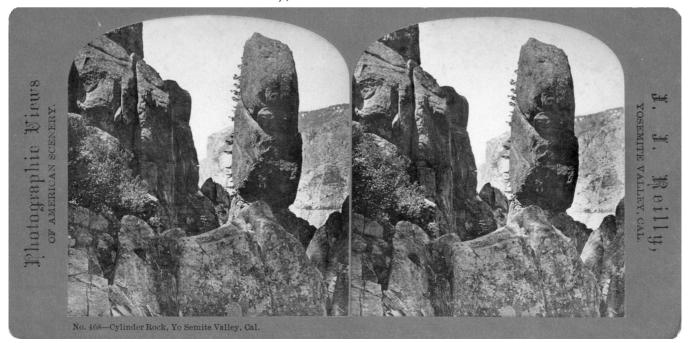
Muir acquired eleven of these stereographs: six within six months (1871-72); the other five, eight to fifteen years later (1879-86).6 For a total of four weeks in 1871and 1872,

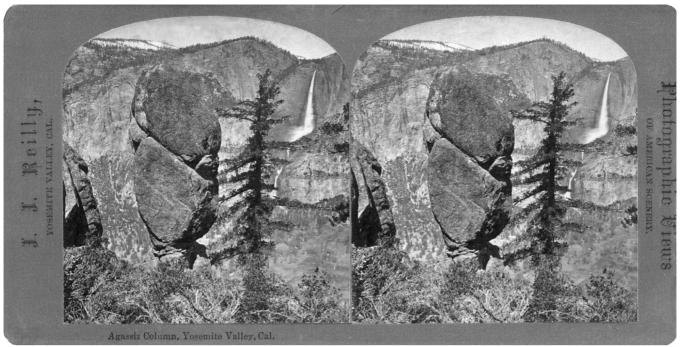
Muir and Reilly traveled together through the high Sierra. There they examined the traces of ancient glaciers and extinct volcanoes—the one through the trained eyes of a geologist, the other through the lenses of a binocular camera.

J. J. Reilly, C. E. Watkins, and George Fiske

Between 1871 and 1876, Reilly took several views of the Agassiz Column. There are three variant titles for these stereographs, but the name given to the monolithic pillar is always "Agassiz Column" (Figs. 5-6). The title encountered most often was published by Reilly before he had a partner or any regular assistants in the Valley. It gives a reasonable estimate of the Column height: thirty feet. Another title ("Agassiz Column, Yosemite Valley, Cal." Agassiz Column and Yosemite Falls or "Agassiz Column, height 75 ft.") were published by Reilly & Company (Figs. 7-8), which consisted of Reilly and Hazeltine as partners and of S. C. Walker and Gustavus Fagersteen as assistants. It gives the natural monolith a height almost twice its actual size (thirty-eight feet high), and an exaggerated sense of monumentality in the process. (Perhaps the figure represents the combined height of the Column plus its base.) Through a

Fig. 6. Photographic Views/ of American Scenery./ J. J. Reilly,/ Yosemite Valley, Cal. 468/ [new series 292]. "Cylinder Rock, Yo Semite Valley, Cal." Albumen prints. Orange and lavender card. Collection of Paul and Kathy Hickman. Also published by Gustavus Fagersteen of Yosemite Valley, California. Also variant negative that was also published





succession of partnerships, Fagersteen came to inherit many of Reilly & Company negatives. The natural monument is described on a stereograph with Fagersteen's imprint as "Agassiz Column; height, 75 feet" which suggests that perhaps it was Fagersteen who was responsible for the similar title published earlier by Reilly & Company.

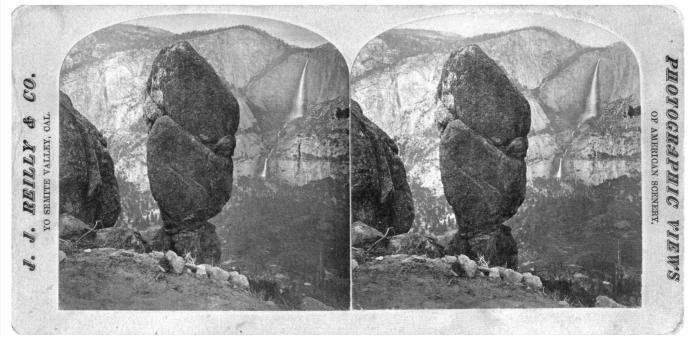
Fagersteen's retention of the name first given to the oblong boulder by

Fig. 7. J. J. Reilly,/ Yosemite Valley, Cal./ Photographic Views/ of American Scenery. No number [circa 1874-76/new series 309]. "Agassiz Column, Yosemite Valley, Cal." Albumen prints. Orange and lavender card. Collection of Paul and Kathy Hickman. Also published on the "American Scenery/ California Scenery" imprint, by Clark, Lake and Company of Rockford, Illinois as No. 829, by W. L. Hoff of La Grange, Indiana, by Lovejoy & Foster of Chicago, Illinois and on the "Stereo Views" imprint.

Reilly may have meaning, since it represented a choice on his part: the Agassiz Column was given a different name by Hazeltine (the Magic Tower) before he became a partner in Reilly & Company.

On Reilly's own imprint as an independent photographer, one of his views is most often described as "Agassiz Column, height 30 ft." In the picture itself, however, almost equal compositional weight is given to a picturesque conifer in the adjacent foreground and to the spring runoff of the Yosemite Falls across the Valley. The chiaroscuro modeling of Union Point and a glistening,

Fig. 8. J. J. REILLY & CO./ YO SEMITE VALLEY, CAL./ PHOTOGRAPHIC VIEWS/ OF AMERICAN SCENERY. No number. "Agassiz Column and Yosemite Falls, Yosemite Valley, Cal." Albumen print. Lavender and orange card. Collection of Paul and Kathy Hickman. Also published (attributed) to Fagersteen (another view in a same lot with Fagersteen on the card). [For a 2007 photo of the rock, see www.supertopo.com/climbers-forum/1228282/Agassiz-Column.]



snow-clad flank of the Yosemite Creek basin add further variety to the composition. In terms of size, shape, and tone, the photographer had created a composition that consists of five principal pictorial elements—a pictorial configuration that undermines the stated artistic intention of the stereograph (its title). The expressed object of our attention is a granitic pillar, thirty feet in height and named after the father of the ice age theory, but the composition of the picture itself tends to make the focus of our thoughts diffused (topographic) rather than concentrated (geomorthic or geomorphologic).

On the imprint of one of Reilly's regional publishers, the view was marketed under another title with wider sales appeal: "Yosemite Falls." The publisher was situated in Indiana, far removed from the geological debate that was raging in California, and he saw no reason to assign a name or size to the large boulder in the foreground of the view. His act of omission indicates that he was oblivious—unlike Reilly or Hazeltine—to the meaning it might possess, either as a balanced rock deposited there by a glacier or as an inexplicable act of God, in the controversy over Yosemite's origins.

Carleton Watkins first photographed the Agassiz Column in the summer of 1875. Examples of his first two stereographs of "Agasiz [sic] Rock" appear on the imprints of Watkins himself and of I. W. Taber. It was Taber's practice to retain the

original title assigned by the Watkins Yosemite Art Gallery. Because the portrait of the great naturalist that Watkins published between 1872 and 1875 is entitled "Agassiz," we may reasonably assume that a typesetter was responsible for the original misspelling on the stereo cards. Watkins may not have met Agassiz when the great teacher called at the Yosemite Art Gallery, but he did publish the portrait that was taken, which demonstrated that he did know of him and his importance, if not from the press coverage that surrounded Agassiz's visit to San Francisco, then from a later source such as the obituary in the Overland or a conversation with Muir. Because Watkins may have met Agassiz, because he did know of him, and because he was a friend of Agassiz's disciple, we may hope to infer meaning from his choice of Agassiz Rock as the name for the natural monument near Yosemite's southern rim.

At first glance, one of the 1875 Watkins views bears a striking resemblance to one of Eadweard Muybridge's 1872 stereographs of "Ten-Pin Rock." On closer examination, however, subtle nuances in compositional structure begin to accentuate their antithetical iconological meanings. At mid-morning a lone pine has cast a deep shadow onto the underside and base of Muybridge's

balanced rock. The photographer has thus achieved a successful visual realization of his stated artistic intention; our tenpin's foothold is made to appear obscure and uncertain. Watkins, on the other hand, has revealed the firm foundation of Agassiz Rock in the crisp, unrelenting light of midday (Figs. 9-10). He has photographed our natural monument a little earlier in the season, from a vantage point a little higher and further west on the Union Point trail, which brings a fuller thread of the Yosemite Falls into closer juxtaposition with the Rock. Several generations later, a sensitive young Ansel Adams wrote a retrospective essay for the Sierra Club that contains a newfound appreciation for the waning waterfalls like those in our atypical nineteenth-century Yosemite views:

It is a typical modern conceit to demand the maximum dimension and the maximum power in any aspect of the worldwhether of men or mountains. It is better to accept the continuous beauty of the things that are, and forget comparisons of effects utterly beyond our control. An Oriental esthete would never question the exquisite charm of those pale threads of water patterned on shining stone. The American mode of appreciation is dominantly theatrical-often oblivious of the subtle beauty in quiet, simple things.7

On the Union Point trail and in San Francisco workrooms, one pic-

Fig. 9. Watkins' Pacific Coast,/ 26 Montgomery St., opposite Lick House entrance, San Francisco. 809. "The North Dome from Union Pt., Yosmite" [sic] [Agassiz Column at right]. Albumen prints. Orange and lavender card. Collection of Paul and Kathy Hickman.



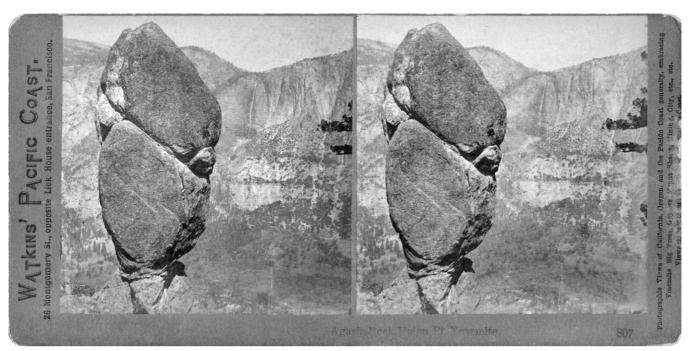


Fig. 10. Watkins' Pacific Coast,/ 26 Montgomery St., opposite Lick House entrance, San Francisco. 807. "Agasiz [sic] Rock, Union Pt., Yosemite." Albumen prints. Orange and lavender card. Collection of Paul and Kathy Hickman.

ture-making decision remained within the firm control of Muybridge and Watkins, from composing the initial images on the ground glass to positioning of the finished prints in the cutting die: the orientation of the natural monument within the picture frame. In "Ten-Pin Rock, Union Point," the central longitudinal axis of the Rock is rotated three degrees to the right of the stereograph's vertical axis; the photographer has portrayed the Rock as imbalanced, leaning to the northeast, ready to plunge into the Valley. (In a subsequent section I shall pursue a critical interpretation of the iconological meaning of the Muybridge gravity-defying ten-pin.) In "Agasiz [sic] Rock, Union Pt. Yosemite," the longitudinal axis of the Rock is positioned at a perfect right angle to the broad, horizontal base of the picture frame. Watkins, quite unlike Muybridge, has chosen to portray the Rock as upright, balanced within a photographic time frame, in a frozen state of counterpoised equilibrium. He has chosen to emphasize the relative stability and relative permanence of Agassiz Rock. He has succeeded in making his geologic monument to the father of the ice age theory look balanced and look old. He has made it look balanced, as though it were a glacial erratic, deposited near Union Point by "God's great plough" during the

Glacier Point stage of the Pleistocene epoch, and he made it look old. older that the Book of Genesis, as though it were a Rosetta stone for Muir's "great open book" on Yosemite's genesis.

Watkins took four "new series" views of the Column between 1878 and 1881, and he published each one as "Agassiz Rock" (Fig. 11). According to one connoisseur of photographic esthetics, Weston J. Naef, after the loss of the "old series" negatives to I. W. Taber in a bankruptcy proceeding, "Watkins was forced into the artistic stagnation of repeating himself." Naef had already acknowledged that at least one "new series" stereograph was a notable exception. In the case of "Agassiz Rock, Union Point, Yo Semite" (Fig. 12), "a highly dramatic composition with strong contrasts of light and shadow," Naef was free to admit that Watkins had indeed made "an artistic aboutface."8 The former lack of widespread critical

recognition for the photographer's "new series" views can be traced to the relative scarcity—to a partial knowledge-of his later body of work. There is much that is new about the "new Series" views; they are an undervalued body of work that deserve the modern critical

Fig. 11. Watkins, 427 Montgomery Street, San Francisco. 844. "Agassiz Rock and the Yosemite Falls, from Union Point." 21 3/8 x 15 3/8 inches mammoth-plate. Albumen print. Collection of Gordon L. Bennett of Kentfield, CA; sold at the Sotheby's auction on 28 April 2004.



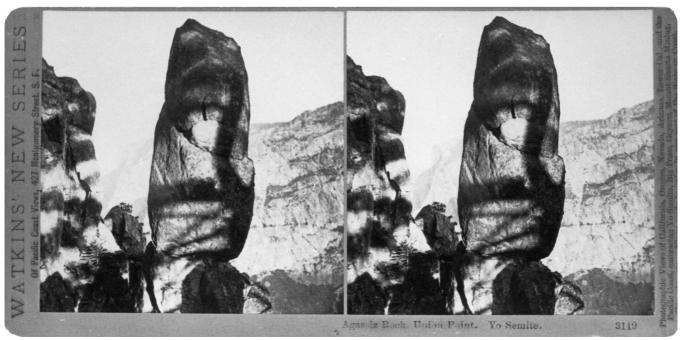
reevaluation they have begun to receive. Biographer Peter E. Palmquist has described the renewed subjectivity—the freshness and the vitality—of the later Yosemite photographer; co-curator Martha A. Sandweiss has also challenged Naef's overall opinion of the "new series" views.9 In a comparative formal analysis, Sandweiss has assessed a few of the later Yosemite photographs in term of stylistic evolution (as opposed to artistic stagnation). I agree with Naef to a limited extent, but with Palmquist and Sandweiss to a far greater extent. In the "new series" views, a little of the old was sometimes repeated, but it was often modified or transformed in an ongoing process of artistic growth or change. A body of work is created in response to a constant stream of ideas and emotions—refining, elaborating, challenging old practices in a complex process of interaction.

Two of the "new series" views of Agassiz Rock were taken from an identical vantage point to one of the "old series" stereographs, but the new photographs were taken late in the spring and early in the morning. The societal and creative roles of one complex individual were intertwined in the retaking and making of these mammoth-plate and "boudoir" photographs. Watkins the failed, middleaged businessman was forced to retrace his steps to retake a lost negative; Watkins the embittered, introspective, mature artist was a changed man with a new vision. A consummate master of photographic technique and composition has repeated himself, with the old intellectual rigor, but with a new, unspeakably personal response to the touchstone of his artistic career, the Yosemite Valley. From an old coigne of vantage on the Union Point trail, our pioneer cameraman decided to expose a mammoth-plate negative with a wide-angle lens, which placed a new emphasis on the dark foliage foreground and middle-ground trees. By means of a new forced perspective, and by means of a new tonal juxtaposition between a shadowsplashed Rock and bright wash of Falls. Watkins has created a photographic masterwork that succeeds in re-creating an overpowering illusory sensation of deep space. In "Agassiz Rock and the Yosemite Falls, from Union Point," in portraying dappled light raking across the time-worn Natural monument, our frontier photographer has displayed an artistic sensibility comparable vet unrelated to the wood interiors of Durand, the sous bois landscapes of Corot, and the *plein air* impressions of Monet. To at least one theorist of French avant-garde art turned cultural historian of the American frontier (myself), subjective interpretations like the mature responses of Watkins to Yosemite are pure photographic embodiments of salon critic Emile

Zola's 1866 definition of a work of naturalist art: "an imprint of the Creation perceived through a temperament."

In 1875, George Fiske had assisted Watkins in photographing the Yosemite Valley from the Union Point trail. Four years later, Fiske commenced his own life's work: independent view photographer in Yosemite Valley. His first printed list of photographs includes two 5-by-8inch views of Agassiz Column (Fig. 13). The first view was reproduced as a photolithograph in E. S. Denison's Yosemite and the Big Trees of California (1881), and by 1882, it was also being marketed in Taber's first printed catalog of views. Eight of the eight in Yosemite and the Big Trees of California are credited reproductions of Watkins photographs, but in the case of our natural monument, Denison opted to reproduce one of Fiske's more objective "boudoir" views in preference to one of Watkins's more subjective "new series" views. Its caption in Denison's book is identical to a title found elsewhere in Fiske's own hand: "Agassiz Column 7 ft. diameter 38 ft. high."10 Of all Yosemite's early cameramen, only two acquaintances of Muir, Reilly and Fiske, are known to have made a close enough study of the large, oblong boulder to have recorded any sort of reasonable dimensions for it

Fig. 12. Watkins' New Series/ Of Pacific Coast Views, 427 Montgomery Street, S. F. 3149. "Agassiz Rock, Union Point, Yo Semite." Albumen prints. Orange and lavender card. Virginia Adams Collection, Center for Creative Photography, University of Arizona,



in their titles, and only Fiske gives us its actual, physical measurements, which means that within the confines of our case study, he was the geomorphological in orientation.

By the end of 1881, the Denison volume had undergone a bizarre transformation into an untitled, uncredited commercial edition. The lithographic captions of Yosemite and the Big Trees of California are replaced by typeset advertisements for business establishments of San Francisco. Across the gutter from each full-page ad is an unidentified print in a new defiled state. Across the top of the first state of "Agassiz Column," running parallel to the diagonal fracture in the granitic rock mass, a commercial lithographer has superimposed four lines of shaded super graphics onto the planar southern face of our natural monument: "ALEX MACKAY/ CARPETS & OIL CLOTHS/ 715 MARKET ST./ S. F." The commercial edition transforms the New World's Garden of Eden and "God's first temples" into tawdry roadside attractions; Natural monuments become billboard for the gods of Mammon.

Several generations later, Yosemite's preeminent twentiethcentury photographer, Ansel Adams, was roused to action by the commercial exploitation of our national parks. Adams blamed the commercial monopoly in Yosemite Valley for the mindless destruction of Fiske's glass-plate negatives. Several years later, still incensed, Adams wrote a polemical essay for the Sierra Club entitled "Problems of Interpretation of the Natural Scene": "I believe a philosophy of appreciation has taken root in the consciousness of the American people. Even though distorted by a false emphasis and exaggerations of commercial exploitation and advertising, the facts of our magnificent land are nevertheless slowly rising above the tides of confusion... One weakness in our appreciation of nature is the emphasis placed upon scenery, which in its exploited aspect is merely a gargantuan curio." [original emphasis]11

Adams regarded Fiske as "a top interpretive photographer."12 In what sense can we regard a geomorphic view like Fiske's self-effacing depiction of Agassiz Column as a "interpretive" photograph? In a formal and critical analysis of a comparable view by a celebrated contemporary,

William Henry Jackson. we shall define photographic picture-making as a "constructive" artistic means for exercising "the mind's freedom."

From Alaska to Florida. from the spring of 1890 into the winter of 1892, four traveling companions had toured the North American continent together: the professional journalist J. W. Buel, the professional photographer W. H. Jackson, and two photographic assistants. The purpose and result of their two-year collaboration was the production of a large quarto volume, illustrated with hundreds of halftone reproductions. Their Pictorial and Descriptive History of Our Country's Scenic Marvels as Delineated by Pen and Camera went through at least twelve printings under a succession of three main titles within the next three years: Wonders of America (1892), America's Wonderlands (1893), and Glimpses of America

(1894). Buel visited the Yosemite region in the winter of 1891, but none of the book's reproductions indicate that he was accompanied by any of the photographers in his entourage.

Fiske, on the other hand, is known to have resided in the Valley through the winter in question. All the winter views of Yosemite that accompany Buel's text were taken by Fiske in 1879-80; 85% of the summer views, on the other hand, were taken by Jackson or his assistant in 1888-89. The three remaining summer views are full-scale reproductions of Fiske's 4-by-7-inch "boudoir" views. Each of these topographic or geomorphic views is a straightforward depiction of an isolated subject, situated within the framework of a closed, centralized composition and oriented parallel to our picture plane (the photographer's ground glass). By portraying each subject in almost total isolation from its surrounding environment, the photographer has

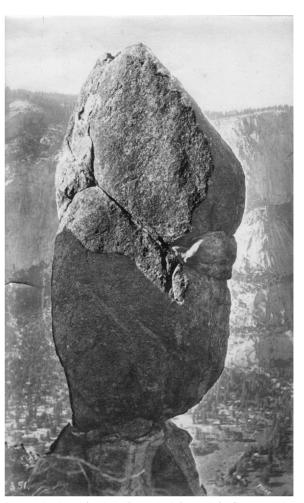


Fig. 13. Fiske. 351. "Agassiz Column, 7 ft. diameter, 38 feet high." 7 1/8 x 4 1/4 inches boudoir view. Albumen print. Collection of Paul and Kathy Hickman.

conferred a sense of monumental dignity upon each natural object. Fiske preferred to equip his 5-by-8inch camera with a standard focallength lens, an objective with a more selective, less all-encompassing field of vision than the wide-angle lens on Jackson's 8-by-10-inch camera (the Dallmeyer No. 4 Wide-Angle Landscape Lens on Jackson's 18-by-22-inch camera had a comparable angle of coverage). Fiske's "objective" for taking "boudoir" views was really a subjective optical means that he exploited to close the psychological distance between viewer, subject, and object: it was a self-effacing means that he utilized to create an illusory sense of direct confrontation between Yosemite's armchair travelers and its colossal-or at least monumental-natural objects.

Buel's acquired a copy of Fiske's first view of "Agassiz Column" (the one in Denison's out-of-print book), and in preference to Jackson's view of "Agassiz Rock"—like Denison vis-

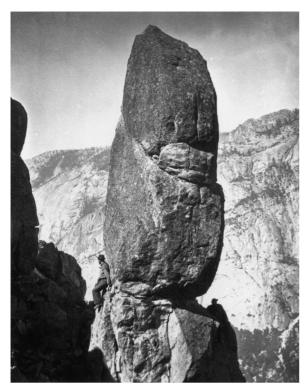


Fig. 14. Fiske. No number. "Agassiz Column." 11 x 14 imperial view. Albumen print. Yosemite Museum, Yosemite National Park, CA.

à-vis Fiske and Watkins—he opted to reproduce Fiske's view and title, perhaps because he thought it was a bolder portrayal of the natural monument, or perhaps because he believed it provided more compelling visual evidence for some aspect of his eclectic theory on Yosemite's geological origins.13 Buel's effusive, inflated rhetoric reads like a cosmological revelation on Yosemite's genesis; his esthetic terminology was intended to place the Victorian armchair traveler in a receptive mood for having "a glorious vision" of the awesome forces that had shaped the Valley: "Look around, for on every side appear evidences of mightiness, the awefulness of those powers which sometimes escape from internal reservoirs, or break away from the fastnesses where they were born; the bursting of lava beds, the tearing down of glaciers, the down-sweeping of avalanche, and the steady flow of gnawing waters."14

An 11-by-14-inch view entitled "Agassiz Column 85 feet" is included in Fiske's printed lists of the 1890s and 1900s (Fig. 14). By then the geological debate over Yosemite's origins was no longer so heated, and the topographical photographer was willing to sacrifice the geomorphic

precision of "7 ft. diameter 38 ft. high" for an exaggerated height that made his larger view still more impressive and more saleable in a competitive retail market, dominated in these decades by the Taber Photographic Co. (San Francisco), by the Jackson Photograph & Publishing Co. (Denver), and by the successor to Jackson's firm, the Detroit Photographic (or Publishing) Co.

Fiske's other 5-by-8inch was reproduced in another popular, illustrated volume, In the Heart of the Sierras, which went through four editions (and innumerable collations) from 1886 to 1888. A shortened version of the photographer's title for the view was

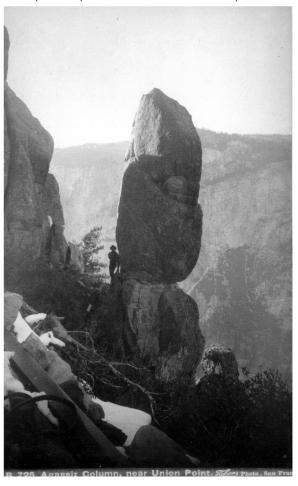
retained by the book's author and publisher, J. M. Hutchings, who entitled the collotype reproduction "The Agassiz Column."15 Other reproductions in the book are credited to the photographers of three San Francisco firms: C. E. Watkins, I. W. Taber, and Thomas Houseworth. In alternative scenarios, our eclectic author and publisher could have opted to acquire and reproduce any one of eight other views of the Column, and he might have honored its title by calling the resulting illustration de text Agassiz Rock or the Magic Tower. The author's text compares the Column to a "a huge ten-pin," which suggests that Eadweard Muvbridge's name for it (Ten-Pin Rock) was also still in circulation. "It looks as though a good strong breeze would blow it over," observes Hutchings, but "thus far" it

has "withstood all storms and earthquakes. It is known as the Agassiz Column."16

Fiske's titles accompanied photomechanical reproductions of his view in the illustrated volumes of Denison (1881), Hutchings (1886-88), and Buel (1892-94). These popular books unquestionably played a major role in making the natural monument near Union Point "known as" Agassiz Column.

Taber was San Francisco's most successful portrait photographer and view publisher of the 1880s and 90s. Taber's first three applications of the name Agassiz to the Rock or Column (Figs. 15-16) were preliminary indications of the consistency that made him such a good businessman. He invariably retained the original titles of two view photographers, C. E. Watkins and George Fiske. In independent acts of artistic volition. Watkins and Fiske had each chosen "Agassiz" as the most appropriate name for the rock or column. From sources other than Watkins and Fiske.

Fig. 15. Taber. B 725. "Agassiz Column, near Union Point," 4 3/4 x 7 15/16 inches boudoir view. Gelatin dry plate. Grey card. Collection of Paul and Kathy Hickman.



the Taber Photographic Company acquired eight additional negatives, which it invariably published as "Agassiz Column." Once the precedent was established by Watkins and refined by Fiske, Taber's subsequent men in the field were no longer permitted to publish even a few cryptic, personal remarks about Yosemite's origins. The possibility for public dissent, for selecting one of the other place names still in circulation for the rock in question, was precluded by the rigid corporate uniformity of Taber's captions. The public had already come to associate the name of Agassiz with the ice age theory; the efficient (though impersonal) mass-production and marketing techniques of Taber played a significant role in associating the name of the Swiss glaciologist with the Yosemite Valley.

The boulder in question was called Agassiz Column or Rock by one photographer, Watkins, who may have met Agassiz and who did know of him, and by a total of three photographers, Reilly, Watkins and Fiske, who were friends of Agassiz's disciple John Muir. It was given other names by several intelligent professionals who accepted either the present or former existence of glaciers in the Sierra Nevada. Their choice of a different name for the natural monolith suggests not an ignorance of Agassiz and his ice age theory, but rather the making of a statement that they disagreed with his followers in the debate over the geological origins of the Valley itself. In the related dispute over a meaningful proper name for the huge boulder near its southern rim, M. M. Hazeltine opted for Magic Tower, while Edward J. Muybridge preferred Ten-Pin Rock.

M. M. Hazeltine

To call the natural monument the Magic Tower might seem at first more a statement of superstitious belief than of scientific opinion. Yet the photographer who invoked magic to explain the inexplicable is the same peripatetic cameraman who had accepted the existence of a living glacier on the northern slope of Mount Lyell. By refuting the ongoing public pronouncements of several professional geologists, J. D. Whitney and Clarence King, our open-minded professional photogra-

pher had himself become a controversial amateur glaciologist. With comparable selfassurance to another frontiersman of our Western alpine wilderness, John Muir, our pioneer cameraman trusted his own eyes and his own judgment more than the learned opinions of better-educated men. The summer before he photographed "the Magic Tower," Hazeltine had witnessed and testified to the living. moving reality of "the Lyell Glacier."

It is almost certain that Hazeltine had met King's former chief on the California Geological Survey by 1867, when Hutchings reports that "Messrs, CLARK, LEIDIG, LAMON, WHITNEY, POST and HAZLETINE [sic]" had assisted him in chaining off the distances between the town of Mariposa and the Upper Hotel in Yosemite Valley.17 (Hazeltine was the California camera-

man for a Boston firm that published several stereographs of the Lower Hotel in Yosemite which cannot postdate 1869.)18 Two years before Whitney and Hazeltine hiked the Mariposa Trail together, the State Geologist had proposed a catastrophic theory to explain the origins of the Valley; the Half Dome was said to have split asunder in "the wreck of matter and the crush of worlds."19 From 1868 to 1872, Whitney had stated in five editions of the Yosemite Book and Yosemite Guide-Book: "All will recognize in the Yosemite a peculiar and unique type of scenery." To account for a "peculiar and unique" geological case, he had reasoned to the layman: "We are led irresistibly to the adoption of a theory of the origin of the Yosemite in a way which has hardly yet been recognized as some of those in which valleys may be formed, probably for the reason, that there are so few cases in which such an event can be absolutely proved to have occurred."20

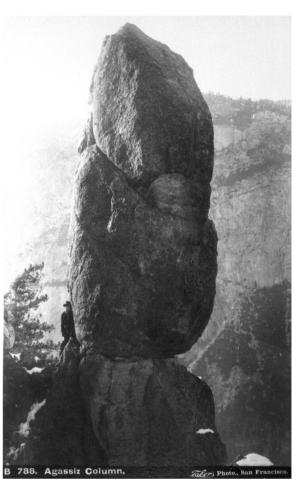


Fig. 16. Taber. B788. "Agassiz Column." 4 3/4 x 7 15/16 inches boudoir view. Gelatin dry plate. Grey card. Collection of Paul and Kathy Hickman.

To explain an exceptional case, the eminent scientist had resorted to an unprecedented and unproved geological cause. Whitney's solution to the problem of Yosemite was to discard Lyell's "attempt to explain the former changes of the earth's surface, by reference to causes now in operation"21 in favor of Cuvier's older dictum, as expressed in his Discourse on the Revolutions of the Surface of the Globe: "None of the agents that she now employs were sufficient for the production of her ancient works."22 Hazeltine's invocation of magic to explain the extraordinary boulder near Yosemite's southern rim, when considered within the framework of nineteenth-century geological theory, is not really any less scientific than his acquaintance's supernatural explanation for the entire Valley.

Martin Mason Hazeltine was born and educated in New England (1827-50). Returning from the Land of El Dorado to his native region, the young man apprenticed himself in the photographic trade from 1852 to

1853. For the next fifty years, until 1902, Hazeltine was a Pacific Coast photographer—independent, peripatetic, and fecund. Our itinerant cameraman sold 199 of his 1867 and 1870 negatives of the Yosemite region to an established stereographic publisher: John P. Soule, of Boston. In addition, he sold another 96 of his 1870 negatives to an established San Francisco firm, and yet another 63 of his 1871 negatives to another established stereographic publisher in the White Mountains of New Hampshire. Our statistical sample of 358 stereographs demonstrated with some certainty that Hazeltine had not yet photographed the Magic Tower by the end of his third season of field work in the Sierra Nevada $(1871).^{23}$

According to the title page, Kneeland's text is illustrated by Soule's photographs, but in reality, Kneeland's appropriation and transformation of Muir's interpretation is illustrated by Soule's prints from Hazeltine's negatives. Unlike Whitney and Kneeland, by 1872 Muir and Hazeltine had accepted the existence of living glaciers in the high Sierra. Like Muir, our frontier photographer believed that giant ancestors of the Lyell Glacier had accomplished a "vast work of mountain-making" in Yosemite's high country. Quite unlike Muir, however, our pioneer cameraman believed, like Whitney and Kneeland, that a supernatural First Cause bore the primary responsibility for the cataclysmic creation of the Valley itself.

Kneeland admits, in the final sentence of Wonders, that geological subsidence "is an exceptional theory, perhaps, but the phenomena are also exceptional."24 The idea that Agassiz Column is an exceptional natural phenomenon is likewise the bottom line of Hazeltine's "Magic Tower; Glacier Point trail" and of Muybridge's dialectical, antithetical, "Ten-Pin Rock, Union Point." Like another Leaning Tower on Yosemite's southern rim, Ten-Pin Rock is portrayed as if it were leaning into the Valley, ready to topple and fall into the bottomless abvss. The Magic Tower, on the other hand. is portrayed atop the broad shoulders of a massive granitic base. Like several other frail, tapering shafts that soar from the southern wall of our Natural Romanesque basilica. the Cathedral Spires, Hazeltine's supernatural Tower is perceived and portrayed on a firm foundation, as vertical and upright, as upheaved and uplifted, as ascendant and transcendent.

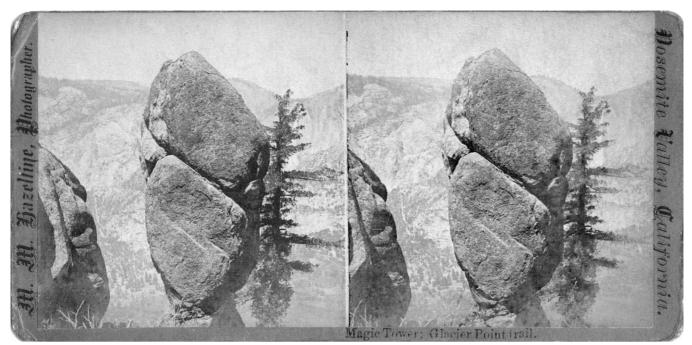
In 1872, Hazeltine took and published several stereographs of "the Magic Tower" (Figs. 17-18), and sometime after New Year Day, 1872, three other "Magic Tower" stereographs were published by Thomas Houseworth & Company (Figs. 19-

20a). Hazeltine had taken a large number of Yosemite stereographs for Houseworth in 1870, and he took another series of imperial and mammoth-plate views that Houseworth had placed on sale by December of 1872. The obvious conclusion would be that Hazeltine took the Houseworth 1872 stereograph of the Magic Tower, but the truth appears to be a little more complicated.

George Fiske, then a staff photographer for Houseworth, was also afoot on Yosemite's trails in August of 1872. Later, as an independent photographer, Fiske published an imperial-plate version of Houseworth's "Magic Tower-on the Union Point Trail." There are two known versions of the Houseworth stereograph: both were taken from the same vantage point, but in one a figure is seated on the east side of the pillar's base, while in the other a different figure is seated on the west side of the base a little later in the day. Fiske's "Agassiz Column 85 feet" was taken from the same vantage point as both, at the same time of day as the second. The two figures in Fiske's view are the same men who appear one after the other in the Houseworth views. Between the three views, each man appears twice, once in the Houseworth view and once in the Fiske, each time wearing the same clothes, sitting in the same

Fig. 17. M. M. Hazeltine, Photographer,/ Yosemite Valley, California no number. "The Magic Tower, from Union Point, on the Glacier Point Trail." Albumen print. Orange and lavender card. Collection of Paul and Kathy Hickman.





place, and assuming a nearly identical pose. These three views were taken either by Fiske alone or by Hazeltine and Fiske together. In 1872, Hazeltine was an independent photographer and publisher, whereas Fiske was only one of Houseworth's salaried employees. Houseworth would not have wanted to offend Hazeltine and disrupt their business relationship, which may explain why he assigned the name Magic Tower to the natural monolith that

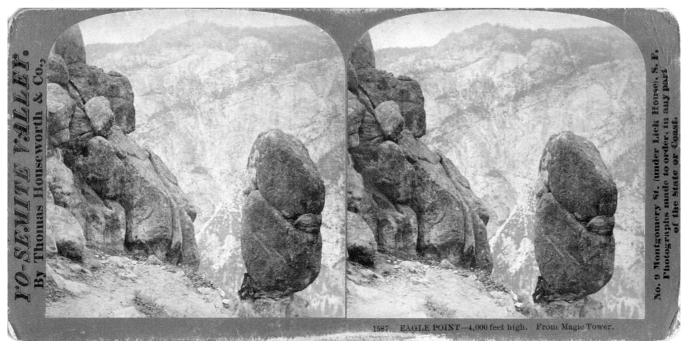
Fig. 18. M. M. Hazeltine, Photographer./ Yosemite Valley, California. No number. "Magic Tower, Glacier Point trail." Albumen print. Orange and lavender card. Collection of Paul and Kathy Hickman.

Fiske preferred to call Agassiz Column after he became an independent publisher.

From 1870 to 1872, Hazeltine was forced to share the tourist trade with Yosemite's other resident photographer, J. J. Reilly. After Hazeltine returned to the Valley in 1876, rather than fight over a limited supply of customers, the former rivals

made the only sensible business decision. They joined forces and formed a monopoly. Hazeltine became a silent partner in "J. J. Reilly & Co." The new firm published at least three "Agassiz Column" stereographs, but there are no known examples of the "Magic Tower" stereograph on the imprint of Reilly & Co. Within a year, before they disbanded their partnership, Reilly and Hazeltine Had made an exchange of duplicate negatives. Hazeltine 's more distant, more topographic

Fig. 19. Yo-Semite Valley/ By Thomas Houseworth & Co.,/ No. 9 Montgomery St. (under Lick House), S. F./[negatives by George Fiske]. 1587. "Eagle Point—4,000 feet high, From Magic Tower." Albumen prints. Orange and lavender card. Collection of Paul and Kathy



"The MAGIC TOWER, from Union Point, on the Glacier Point Trail" was published on Reilly's imprint of 1879 to 1886 as "Agassiz Column, Yosemite Valley, Cal." Hazeltine's closer, more geomorthic "Magic Tower; Glacier Point trail" was probably the stereograph marketed by one of his Midwestern publishers, between 1880 and 1900, as "Magic Tower and Yosemite Falls" (Fig. 21). Meanwhile, from 1882 to 1902, prints from Hazeltine's master set of 1872 negatives continued to appear on the imprint of the photographer himself. Hazeltine's views of and name for the extraordinary balanced rock thus remained in circulation, at least into the 1880s, and perhaps into the 1900s.

Eadweard Muybridge

The eccentric Eadweard Muybridge was born in 1830 in Kington-on-Thames, an ancient Saxon stronghold not far upriver from London; he was christened in a local Anglican church as Edward James Muggeridge (a surname he was to change more than once). As a boy Edward received a good elementary education in England grammar and literature. For generations the London branch of the Muggeridge family had worked in the book trade. By 1859 Muygridge had become an agent for several British and American publishing firms, an independent "publisher and importer" of French, British, and American "illustrated and standard works... upon

the fine arts" and on "theological" and "scientific" subjects; he had just became a new Director of the San Francisco Mercantile Library Association. In the spring of 1859 the Library already housed a circulating collection of ten thousand volumes. The Association sponsored occasional literary reading, and the following spring, a course of four lyceum lectures by the Ruskinian moralist Thomas Starr King. "By 1860," according to one of Muybridge's subsequent associations, Clarence King, "California had made the vast inspiring stride from barbarism to regularity." On the 15th of May, 1860, Muybridge announced to his customers that after he had returned to San Francisco from a pleasure trip, he would be accepting orders to be filled on a book-buying trip; "After my return from the Yosemite I shall, on June 5th [actually on July 2nd], leave for New York, London, Paris, Rome, Berlin, Vienna... for the purchase of Works of Literature or Art." In England, according to biographer Gordon Hendricks, Queen Victoria's physician "is said to have persuaded Muybridge to change his profession, arguing that he should take up an active, outdoor life instead of one devoted to books."25

Muybridge exposed several negatives of the Agassiz Column during

his third visit to the Yosemite Valley (1872); the resulting stereographs were published by the photographic firm of Bradley & Rulofson under the descriptive title "Ten-Pin Rock, Union Point" (Figs. 22-23). (The firm of Bradley & Rulofson always credited Muybridge as being its landscape photographer; it further humored his Olympian temperament by honoring his idiosyncratic place names for natural objects.) Opting for a place name that simply describes the oblong shape and the precarious position of the Rock could be taken as a noncommittal stance in the controversy over the geological formation of the Yosemite Valley, had Muybridge not applied the words "ancient glacier" to seven other views he had taken in the Yosemite region, but outside the Valley itself, in the summer of 1872. Where the Merced River and Tenava Creek now flow in their descent to the Yosemite Valley, Muybridge documented the signs left by ancient glaciers that once occupied their canyons: wide channels, parallel grooves, and erratic boulders.

Since his previous trip to the Yosemite region (1867), the photographer had become familiar with the visual appearance of physical traces of ancient glaciers. One obvious source for his newfound geological

Fig. 20. Yo-Semite Valley./ Thomas Houseworth & Co./ Photographers, 9 Montgomery Street, under Lick House,/ San Francisco, Cal./[negatives by George Fiske]. 1588. "Magic Tower—On the Union Point Trail. Albumen prints. Orange and lavender card. Collection of Paul and Kathy Hickman.



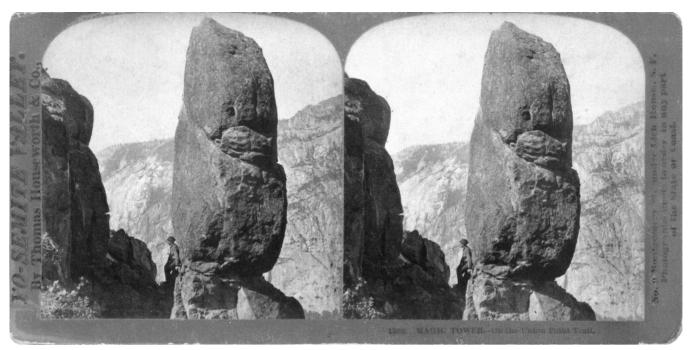


Fig. 20a. Yo-Semite Valley,/ By Thomas Houseworth & Co.,/No. 9 Montgomery St. (under Lick House). S. F./Inegatives by George Fiskel. 1588. "Magic Tower—On the Union Point Trail." Albumen prints. Orange and lavender card. Collection of Paul and Kathy Hickman.

knowledge is a book illustrated with twenty of his photographs, Yosemite: Its Wonders and Its Beauties (1868). Its author, John S. Hittell, had devoted an entire section to "GLACIERS."

They sweep the earth and stones before them, and they polish the general surface of the bed-rock and scratch deep parallel ruts in it... Glaciers were once abundant in the higher portion of the Sierra Nevada, as numerous moraines, ruts and polished surfaces testify...

The Yosemite valley had its glacier, and Mr. King, of the State Geological Survey, thought it was a thousand feet deep. The glacial polish and grooving are found in all the canons leading into Yosemite valley, and especially in the Little Yosemite canon at the lowest place where it can be crossed, and also on the rocks at the Nevada Fall.²⁶

Four years later, in the summer of 1872, Edward J. Muybridge and his photographic assistant William H. Towne exposed several negatives at the brink of Panorama Cliff. As he composed these images on the ground glass of his mammoth-plate and binocular cameras, Muybridge was looking to the east, thinking about the "ancient glacier channel" and the "ancient glacier slides" that he saw on each side of the terminus of the Little Yosemite Valley at Nevada Fall. The geomorplologic titles of the resulting photographs demonstrate that four years later (1872), Hittell's glacial observations were still in the photographer's mind.

Five additional photographs of "ancient glacier" traces were taken at Lake Tenaya. The following spring (1873), a San Francisco newspaper revealed that a former student of glaciologist Louis Agassiz had played a primary as well as a secondary role in stimulating Muybridge's newfound geological awareness: "At the suggestion of Mr. Clarence King, the artist has made several pictures of the ancient glacier channel at Lake Tenaya, and other glacier indications.27

The photographer's "Ancient Glacier Boulders at Lake Tenaya" demonstrates that he could recognize a glacier erratic when he saw one, yet he chose to call a boulder of similar size and shape, but within the Yosemite Valley, Ten-Pin Rock.

In Hittell's text of 1868, Muybridge had read and believed that glaciers once abounded in the "higher portion" of the Sierra Nevada (elevation at Yosemite's eastern park boundary, thirteen thousand feet) and that Clarence King "thought" [past tense] a glacier once occupied the lower third of the Yosemite Valley (elevation at the Bridal Veil Moraine, four thousand feet). The "GLACIERS" section of Yosemite is preceded by a longer section on the "FORMATION OF THE VALLEY." According to Hittell, "most of the great canyons of the Sierra Nevada" were

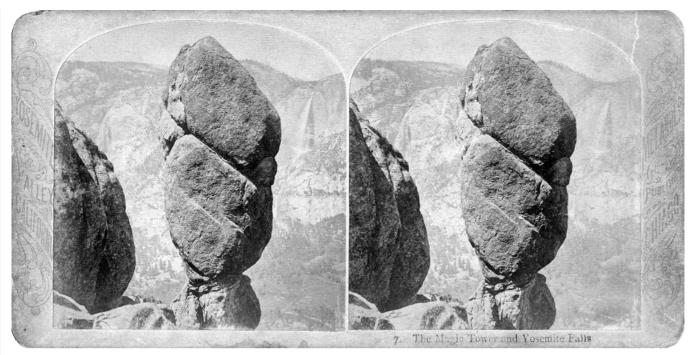
formed by water erosion, "but the Yosemite Valley is an exception":

The most probable explanation of its origin is the theory that it was formed by a great convulsion which tore apart the mountain to a depth very much greater than that now perceptible, that vast masses of rock fell down into the chasm. . . .

Professor Whitney, in the State Geological Survey Report [1865], says "The Half Dome seems, beyond a doubt, to have been split asunder in the middle, the lost half having gone down in what may truly be said to have been 'the wreck of matter and the crash of worlds.""28

In conjunction with scanning the views of arch-rival Carleton E. Watkins in the Yosemite Book (1868) or the Yosemite Guide-Book (in its fourth edition by 1872), Muybridge seems to have read Prof. Whitney's text and to have accepted the State Geologist's categorical rejection of Clarence King's field observations of 1864 and 1866: "There is no reason to suppose, or at least no proof, that glaciers have ever occupied the Valley or any portion of it."29

Bowing to the popular authority of his former chief's public pronouncements, King now refused to admit that in Yosemite he had seen enough unmistakable signs of slow, uniform, glacial action-including smoothed and polished erratic boulders "to establish beyond *doubt*, the former occupation of the Valley by a glacier" [original emphasis]. "Indeed the mass of evidence leaves in my mind no shadow of doubt," he had reported to the State Geologist. In the



spring of 1872, in the introductory chapter to *Mountaineering in the Sierra Nevada*, the ambivalent disciple of Agassiz and Whitney now proposed that a violent paroxysm was responsible for Yosemite's creation: "The most impressive passages of the Sierra valleys are actual ruptures of the rock; either the engulfment of masses of great size, as Professor Whitney supposes in explanation of the pecu-

Fig. 21. Yosemite/ Valley,/ California/ Melander/ Publishers/ Chicago. 7. "The Magic Tower and Yosemite Falls." Albumen prints. Tan card. Collection of Paul and Kathy Hickman.

liar form of the Yosemite, or a splitting asunder in yawning cracks."30

Guided by the cataclysmic hypotheses of Whitney and King, and by the internal logic of his own discerning eye, Muybridge was able to distinguish between the "ancient glacier boulders" of the high Sierra and a comparable but dissimilar

boulder in a peculiar Sierra valley.

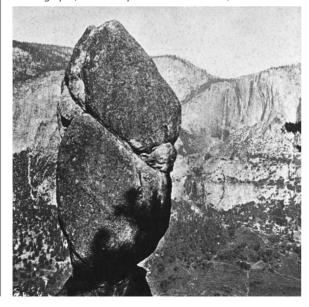
On the level of preiconographic description, Muybridge's name for Agassiz Column, Ten-Pin Rock, is a simple straightforward expression of the oblong, monolithic shape of its eastern face and of the oblique orientation of its monolithic, two-dimensional mass within the picture frame. In at least four collaborative acts of photographic legerdemain, the cameraman and the print finisher have manipulated the natural tenpin into a gravity-defying position that makes it seem ready to wobble, teeter, and fall. In these four examples of the two stereographs, the consistent three- to four

degrees of clockwise rotation from the vertical axis of Ten-Pin Rock might reasonably be regarded as any of three things: the simple result of unintentional vertical drift: the indirect result of a subconscious, psychological predisposition; or a direct result of a conscious picture-making decision. In any case, whether by change or by design, the end result of Muybridge's photographic acts and titles is a visual and verbal evocation of more complex levels of association and meaning. On the levels of iconographic analysis and iconological interpretation, the photographer's "Ten-Pin Rock, Union Point" is an analog to the visionary world of St. John the Divine, an allusion to the supernatural world of Washington Irving, and the expression of the catastrophic world views of two Yosemite geologists, J.D. Whitney and Clarence King.

Photographers vis-à-vis Geologists and a Natural Monument

The nineteenth-century controversy over the geologic origins of Yosemite Valley was never a polite or cordial debate. In heated moments it became a bitter and acrimonious dispute, filled with diatribe and invective. From 1868 to 1878, the most heated exchanges were fired by three mudslinging geologists, two established professionals (Whitney and

Fig. 22. Valley of the Yosemite./ Illustrated by Muybridge, published by Bradley & Rulofson [left and right]/verso: Photographic Illustrations of the Pacific Coast./... Photographed by Muybridge, Published by Bradley & Rulofson,/ Gallery of Photographic Art,/ 429 Montgomery Street, San Francisco. 1401. "Ten Pin Rock, Union Point." 1872. Stereograph half. Albumen print. Tan and lavender card. Department of Prints and Photographs, The Metropolitan Museum of Art, New York.



King) and one "ambitious amateur" (John Muir).

In these same years, five of Yosemite's cameramen became a friend—or at least a personal acquaintance—of one of these geologists. Reilly, Watkins, and Fiske were friends of Muir. Like Reilly and Muir, Hazeltine and Whitney were comrades of the trail, traveling companions who rode and hiked through the Yosemite region together. At King's suggestion, Muybridge photographed and identified traces of ancient glaciers that had once occupied Yosemite's watersheds, but not—according to the geologist's revised theory or the photographer's limited observations—the Valley itself.

At least five of Yosemite's photographers were caught in a cross fire between Muir's doctrine of slow, uniform, glacial action and the irreconcilable, cataclysmic hypotheses of Whitney and King, but unlike his mudslinging associate, each photographer restricted his name calling to rocks. In support of his friend's theory on Yosemite's geologic origins, each photographer issued discreetand sometimes oblique—polemic statements. In independent acts of artistic volition, Reilly, Watkins, and Fiske chose to call Yosemite's most extraordinary balanced rock Agassiz Column or Rock; Hazeltine and Muybridge preferred to call it the Magic Tower or Ten-Pin Rock. The name that Hazeltine and Muybridge gave to Agassiz Column represent the exception rather than the rule, both in the geologic cosmogony they imply, and in the frequency that Yosemite's cameramen chose to adopt them. Most of her photographers preferred to make the large balanced rock a natural monument to the father of the ice age theory.

Notes

- 1. John Muir, "Living Glaciers of California," Harper's New Monthly Magazine 51 (November 1875), p. 775.
- 2. Isabella Graham Duffield Stewart, Memorial of Mrs. Morse Stewart, edited by Morse Stewart (Detroit: no place, 1889), p. 223.
- 3. William M. Ivins, Jr., Prints and Visual Communication (Cambridge, Massachusetts, and London England: The M. I. T. Press, 1969), p. 180.
- 4. Michael Ann Holly, Panofsky and the Foundations of Art History (Ithaca and London: Cornell University Press, 1984), p. 44.
- 5. Mariposa Weekly Gazette, August 11, 1871.
- 6. Muir Papers: MS 48, 58.1-2, Stuart Library, the Holt-Atherton Pacific Center for Western

- Studies at the University of the Pacific, Stockton, California.
- 7. Ansel Easton Adams, "Retrospect: Nineteen-Thirty-One," Sierra Club Bulletin 17 (February 1932), p. 4.
- 8. Weston J. Naef, Era of Exploration: The Rise of Landscape Photography in the American West, 1860-1885 (Boston: Albright-Knox Art Gallery and the Metropolitan Museum of Art, distributed by New York Graphic Society, 1975), p. 59.
- 9. Peter E. Palmquist, Carleton E. Watkins: Photographer of the American West, foreword by Martha A. Sandweiss (Albuquerque: Amon Carter Museum by the University of New Mexico Press, 1983).
- 10. E. S. Denison, Yosemite and the Big Trees of California (San Francisco: E. S. Denison, 1881), lithograph by H. S. Crocker and Company, San Francisco, "Agassiz Column, 7 ft. diameter, 38 feet high" [Fiske #351: Fig. 12].
- 11. Ansel Adams, "Problems of Interpretation of the Natural Scene," Sierra Club Bulletin 30 (December 1945), p. 47.
- 12. Ansel Adams interviewed by Paul Hickman at the Adams' home in Carmel Highlands. California, in March 15, 1978.
- 13. J[ames] W[illiam] Buel, America's Wonderlands: A Pictorial and Descriptive History of the Country's Scenic Marvel as Delineated by Pens and Camera (St. Louis: Historical Publishing Company, 1893), pp. 7, 189: "Agassiz Column, Yosemite" [Fiske #351: Fig. 12].
- 14. Buel, America's Wonderlands, p. 172.
- 15. J. M. Hutchings, In the Heart of the Sierras (Yo Semite Valley: Old Cabin and Oakland: Pacific Press Publishing House, four editions, 1886-88), opposite p. 468: the collotype reproduction "The Agassiz Column" [Fiske #352, photo-typo by Britton & Rey, S. F.].
- 16. Hutchings, In the Heart of the Sierras, p. 468.
- 17. "Distances to the Yo Semite Valley," Mariposa Weekly Gazette, vol. 13, September 14, 1867, p. 3, col. 1.
- 18. Two John P. Soule stereographs of the Lower Hotel in Yosemite which cannot postdate 1869: 1081 "Sentinel House-Yo Semite Valley" (collections of Eldon Grupp, Paul and Kathy Hickman, Paul Rubinstein and the late

- Louis H. Smaus) and 1134 "The Sentinel House-Yo Semite Valley" (collections of Denver Public Library, Eldon Grupp, Paul and Kathy Hickman, Russell Norton and Richard N. and Mona Pitman).
- 19. J. D. Whitney, Geology, Volume 1 (Philadelphia: Caxton Press, 1865), p. 421.
- 20. J. D. Whitney, The Yosemite Book (New York: Julius Bien, 1868), p. 77.
- 21. Charles Lyell, Principles of Geology, being an Attempt to Explain the Former Changes of the Earth's Surfaces, by References to Causes now in Operation (London: John Murray, 1830), title
- 22. Mott T. Greene, Geology in the Nineteenth Century: Changing Views of a Changing World (Ithaca and London: Connell University Press, 1982), p. 26.
- 23. Paul Hickman, "Martin Mason Hazeltine: A Chronology", Stereo World 20 (January/February 1994), front cover, pp. 1, 4, 6-10.
- 24. Samuel Kneeland, The Wonders of the Yosemite Valley, and of California... With original photographic illustration [ten or twenty], by John P Soule [negatives by M. M. Hazeltine], first-third editions (Boston: Alexander Moore, Lee & Shepard and New York: Lee, Shepard & Dillingham, 1871-1872), p. 97.
- 25. Gordon Hendricks, Eadweard Muybridge: The Father of the Motion Picture (New York: Grossman Publishers, A Division of The Viking Press, 1975), pp. 8-13.
- 26. John S. Hittell, Yosemite: Its Wonders and Its Beauties. . . Illustrated with Twenty [2½ x 3½"] Photographic Views taken by "Helios" (San Francisco: San Francisco and New York: H. H. Bancroft & Company, 1868), pp. 44-45.
- 27. "Photograph Studies: Eight Hundred Views of Yosemite Valley and the Big Trees: Edward J.
- Muybridge," Daily Alta California (San Francisco), 7 April 1873, p. 1.
- 28. Hittell, Yosemite, p. 43.
- 29. J. D. Whitney, The Yosemite Book (New York: Julius Bien, 1868), p. 76.
- 30. Clarence King, Mountaineering in the Sierra Nevada (Lincoln and London: University of Nebraska Press, 1970, reproduced from the 1872 edition published by James R. Osgood and Company, Boson), p. 7.

$3\text{-}D\ Busan$ (Continued from page 11)

Next Congress

The next ISU World Congress will be July, 2017, in Irvine, California. As local clubs become more out of vogue and the ISU International membership includes more and more members who feel as though they are in a vast wasteland without local like-minded 3-D practitioners, the bi-annual Congress is just one way to find fellowship with other members. I certainly don't think it's too early to start spreading and sharing the 21st ISU Congres trailer. You can find it at http://tinyurl.com/ zbv2wv8 or at the proper player enforcer link: http://tinyurl.com/ hhfbpqm.

If you attended the NSA's 2012 3D-Con in Costa Mesa, California, you will be pleased to hear that many of the same individuals and groups will be hosting the 2017 Congress. The host clubs will be the NSA, the ISU, the Los Angeles 3D Club (LA 3D) and the new non-profit 3-D SPACE. You can check online after the 2016 3D-Con to see schedules, registration, etc. at: 3d-con.com/2017. Certainly the 2016 3D-Con being held in Tulsa, Oklahoma, will be a nice preview of the 2017 joint event. See 3D-con.com. **₽₽**

Not to Skirt the Issue...

Crinoline Stereo Book Next from LSC

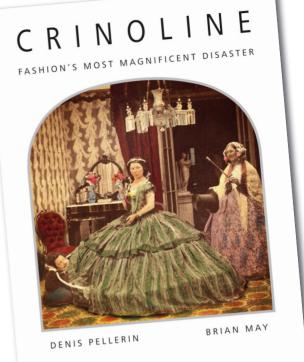
by Denis Pellerin and Brian May

This April, we [London Stereoscopic Company] will launch our new stereoscopic book, Crinoline: Fashion's Most Magnificent disaster at the same time the exhibition "Undressed: 350 years of Underwear in Fashion" opens at the Victoria and Albert Museum in London. This eleven month long exhibition will showcase a few stereos and a stereoscope from the Brian May collection.

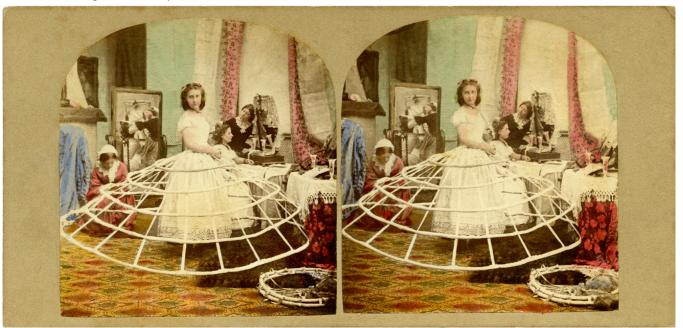
What is Crinoline, we hear you ask? Known in the States as a hoopskirt or hooped petticoat, Crinoline was originally a fabric made stiffer thanks to the use of horsehair (crin in French). It appeared in France in the late 1820s and was first applied to make stiff collars before being used to replace starched petticoats and help extend ladies' dresses. Over the years, layers upon layers of petticoats (up to fourteen sometimes) ended up giving women that bell-like shape one often sees in paintings and prints from the nineteenth century, but had the disadvantage of being very heavy and of turned walking or simply moving around into a hot and difficult process. That is when ingenious inventors came with lighter replace-

ment solutions. The first one was the inflatable petticoat which came complete with a rubber tube that was used by the belle to blow herself up to the right size before entering a drawing room at a ball and deflate to more reasonable proportions when the ball was over and she wanted to get into her carriage back home. Funny though it may be to imagine

a roomfull of young ladies blowing themselves up, the inflatable dress extender had the inconvenience of deflating unexpectedly (often with a very unpleasant sound you can easily imagine), and since no puncture kit was provided the poor lady was therefore compelled to leave in a mortified hurry. In 1856, a French seamstress named Angélique Caroline Milliet, patented a carcase petticoat that was made of steel watch spring hoops held together by strips of fabric. What



Anonymous photographer, "Mysteries of the Crinoline" 1857. One of the most outrageous views showing the size of the petticoat frame.







Michael Burr, "Crinoline Difficulties" early 1860s, showing the problem of simply getting through a gate.

soon became known as The Cage, was born! It was light, it was flexible, it was robust (though the hoops would sometimes snap and hurt the wearer), it freed the legs, and it could be extended to huge dimensions with no great gain in weight. While some women remained faithful to the stiff petticoats, the majority of them quickly adopted the cage and would stick to it through thick and thin, despite innumerable attacks against it, for over a decade. And so both the horsehair petticoats and its steel counterpart continued to be called Crinoline.

What exactly got us, historians of stereo photography, interested in the fashion world and more especially in Crinoline? Actually, it has little to do with fashion and a lot with the stereoscope. When the latter was first introduced in England in the early 1850s, some of the first commentators reflected on its ability to reproduce the "full roundness of life." As Sir David Brewster, who fabricated this die-hard myth would have us believe, the stereoscopic craze did not happen overnight. It was gradual and went through several stages before reaching that time when the London Stereoscopic Company made it their goal that there should be "No Home without a Stereoscope." Indeed it was not until 1856, the very year the cage petticoat was introduced and the London Stereo-

scopic Company published their first catalogs, that stereoscopy really took off. And oddly enough the final demise of Crinoline also coincided with the end of the first Golden Age of the stereoscope. There is therefore a strong connection between the "full roundness" of the skirts of the time and the illusion of volume seen

through the oculars of a stereoscope. It was nearly a match made in heaven and it explains why there are so many stereocards of Crinolines.

The first real stereoscopic "hits" occurred in December 1857 when one individual view and two sets of cards were competing for public attention. The view was Francis Frith's "Crocodile on a sand bank in the Nile," number 335 in his series about Egypt and advertised in the press as "The Wonderful Crocodile." The first set of cards was "The Ghost in the Stereoscope", which was described as "the appearance of an unearthly visitant to some rustic gamblers. who immediately take to flight with the most ungraceful alacrity." The

second, a humorous as well as slightly risqué set, was "The Mysteries of Crinoline," showing the different steps necessary to turn a slim young woman into a crinolined monstrosity. This early series of stereos marks the beginning of a long succession of cards making fun of the prevailing fashion. Indeed most stereocards showing Crinoline exaggerate its size and cumbersomeness. Some, like the

W.H.J. Carter, "IT IS TO BE DONE TINEY: I HOPE NO ONE IS LOOKING, YOU MUST BARK LOUD TY, IF YOU SEE A GENTLEMAN COMING. CRINOLINE 1862." A likely inspiration for Michael Burr's gate view.





Michael Burr, "Crinoline Difficulties" has a young woman stuck in the door of an omnibus and showing more than she should.

one of the man giving his arm, or rather scarf, to his wife, are from cartoons published in the press (in that particular case, a cartoon by French caricaturist Honoré Daumier). A few are inspired by prints that were sold at the time (as in a couple of Michael Burr's "Crinoline Difficulties") and the rest are of the photographer's own invention but retain a lot of the feelings that were prevalent in the press of the period. There are thousands of references to Crinoline in the newspapers and magazine of the decade, most of them of the disparaging kind. Columnists, cartoonists, writers and more especially

husbands, were very harsh on Crinoline and no publication was stronger in its criticism than the satirical periodical Punch. Not a week passed without some attack or other on Crinoline and its devotees. So violent was Punch's Crusade against Crinoline, either in print or in drawing, that in October 1858, several newspapers published the following statement: "USED UP AT LAST. — For the first time in three years a number of *Punch* has appeared in which there is neither wood-cut nor paragraph about crinoline."

Punch's attacks continued years after these lines were printed but they were of no avail whatsoever. Crinoline lived on, expanded in size in the early 1860s, changed shape (from totally round it became flat in the front and longer in the rear) and although its death was announced nearly every season with renewed hopes, it didn't die overnight but gradually dwindled away only to be replaced by the "bustle".

Stereos illustrate most of the comical aspects of Crinoline: its exaggerated size of course, but also the fact that it kept men at a distance, proved very inconvenient on omnibuses—both for the wearer and for her fellow passengers, provided a good hiding place for lovers, exposed more of the lady's anatomy than was judged decent, could be used as a bathing machine, a tent, a cage to keep rabbits, etc. The cards were most probably bought by husbands who could laugh at what they saw as a most ridiculous fashion, especially when their wives were not around.

There was however a darker side to the Crinoline that was never, and for good reasons, illustrated for the stereoscope. Crinoline was responsible for the untimely death of thousands of women who got too close to a fireplace and caught fire when their skirt brushed past the flame or the red hot embers. Few survived,

(Continued on page 40)

Inflatable petticoats in Punch, or The London Charivari, 17th January, 1857.



Emily. "Madame Bonton says 'the Circumference of the Crinoline should be Thirty-Six Feet!" Caroline. "Dear me!-I'm only Thirty-Two-I must Inflate a little!"

3-D SPACE Update by Eric Kurland

he 3-D SPACE collection continues to grow. We have begun the task of cataloging the many objects and images from the former Portland 3-D Center as well as the numerous videos from the late Dan Symmes. We have also received a number of donated items from 3-D collectors that will be added to our exhibits, and we have been acquiring pieces that belonged to our friend and mentor, Ray Zone. One of the most recent additions to the collection is this original comic book art "On The Birth Of 3-D Comics" by artist Joe Kubert. This self-portrait depicts Kubert, Norman Maurer and Leonard Maurer, the creators of the first 3-D comic book, surrounded by their characters (including Mighty Mouse, The Three Stooges, and Tor).

This artwork was created for the cover of the February, 1989 issue of Amazing Heroes magazine, "AH in 3-D", which focused on the history of 3-D comics. The art is signed by Kubert, dated '88, and inscribed "WITH REGARDS TO RAY '3-D' ZONE." We are thrilled to have rescued this piece to include in our 3-D SPACE collection.

3-D SPACE is very grateful for the support the National Stereoscopic Association and the 3-D community has given us throughout 2015. Over the last 12 months we have presented numerous 3-D movie screenings. exhibited 3-D history at museums and events. taught 3-D at schools and conferences, and most recently produced the 12th Annual LA 3-D Movie Festival. Moving forward, we have big plans for 2016, including a major 3-D motion picture preservation project in collaboration with the 3-D Film Archive, the group that has already saved the

films Dragonfly Squadron, The Bubble, The Mask, and the wonderful 3-D Rarities collection. We will have big news soon about another title from the golden age of 3-D cinema that needs your help to be digitally restored. Watch for the details at our website www.3-DSPACE.org.

You can continue to support our efforts and turn your generosity into tax savings by making a charitable contribution to 3-D SPACE. As a nonprofit we rely entirely upon the financial support provided by our donors. We are excited to announce the launch of our Sustaining Patron Program through the online service Patreon. For as little as \$5 a month Sustaining Patrons will receive special updates on 3-D SPACE's activities and programs and will have their

names posted on a special "Thank You" page on our website. Your recurring contribution will allow us to maintain our operations, programs and events, and to continue the important work of conservation of the many historical artifacts, images, and motion pictures in our collection. One-time donations are also accepted online through the Paypal Giving Fund.

Help us digitize and share the 3-D SPACE photo collection. Reaching the monthly pledge level of \$1,500 per month will allow us to proceed with the cataloging and digitization of our vast collection of stereoscopic images. Once this goal level is achieved, we will regularly post 3-D content from our collection online so that it can be shared and enjoyed

> by the public. While we ask that Sustaining Patrons donate a minimum of \$5 a month. you are always welcome to increase your monthly contribution amount to provide even more financial support to 3-D SPACE.

We are still seeking corporate sponsors and angel donors in our quest to raise the funds to purchase a facility to serve as the permanent home of 3-D SPACE. We have located the perfect building for our needs, with an existing 100seat theater, gallery space, classroom, and library, but it comes with a hefty price tag, and we need help and advice in order to make the 3-D museum a reality.

3-D SPACE is a nonprofit corporation with IRS 501(c)3 status. Your donation is tax deductible to the full extent as provided by law.



Women's Views The Narrative Stereograph in Nineteenth-Century America MELODY DAVIS

eaders could be forgiven if, from the main title, they assume that Women's Views by NSA member Melody Davis concentrates solely on

Women's Views -The Narrative Stereograph in Nineteenth-Century America by Melody Davis, University of New Hampshire Press 2015, ISBN 978-1-61168-839-9. 8x10" 256 pages, 139 illustrations (120 stereos) viewer included. \$40.00 paperback from ww.upne.com/1611688382.html

19th Century Women and **Stereos**

review by John Dennis

the portrayal of women through stereotypical representations in 19th century stereoviews. But the book's subtitle, The Narrative Stereograph in Nineteenth Century America provides an indication of what a wide and deep examination of these images (call them sentimental, comic or genre), is

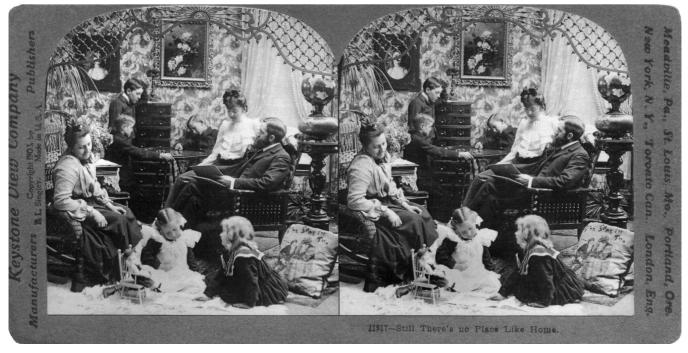
contained in this extensive look at how stereoviews both reflected and encouraged changes in the domestic, social, sexual and economic lives of 19th century American women.

The "Women's Views" of the title refers not just to the presence of women of various classes and conditions in the images but to the fact that it was largely women who purchased, owned and shared these stereos as part of 19th century

domestic life. The latter is emphasized more than once in the text, and is summarized at length in the "Conclusion" chapter with thoughts like: "The consumption of goods for personal pleasure and parlor status, in which stereography played a prime role, enshrined women at home and simultaneously pushed them out the door into a space of shopping and earning potential."

In essence, while the common response of men in charge of commerce and politics was that women "belong in the home," stereoview publishers and their salesman knew quite well that women controlled much of the domestic organization and purchasing. Narrative stereoviews which recognized that fact (even while treating it with seemingly contradictory comedy or even

Nearly the ultimate in posed domesticity, Keystone No 11917, "Still There's No Place Like Home" appears on page 45. At rear is a stereoview cabinet with stereoscope on top, and as described in the book's text, "Prominently to the side, the mother sits, attentive and observant, the orchestrator of this environment.



ridicule) sold well and expanded the audience for more views!

Each of the 120 stereos reproduced at full size is discussed at length as to its depiction of gender stereotypes, power dynamics, comical or sentimental situations, and serious or playful innuendo. Narrative views from several publishers appear, including Kilburn, Stoddard, Keystone, F.G. Weller, Underwood, James Elliott, Melander & Brother, Littleton View, D. Appleton, Michael Burr, Rau, H.C. White, M.M. Griswold, C.H. Graves, J.W & J.S. Moulton, C.L. Wasson, Whiting View and Griffith and Griffith. Even those with good collections of similar views are likely to find some gems they've never seen in this impressive collection.

As might be expected, crinoline views are covered in the "Erotic Views" chapter. (See the announcement of Crinoline: Fashion's Most Magnificent disaster by Denis Pellerin and Brian May in this issue.) Only one example, "The Swing," from Michael Burr is illustrated. The interesting point made about the two crinoline views discussed is that both show enticingly exposed petticoats beneath the frames, yet were not owned by a man but by a Carrie F. Wood, as written on the backs.

The introduction provides as complete and thoughtful a history of stereography as I've found in any recent work devoted to a specific aspect of the subject, including even details like the fact that Charles Wheatstone could free-view wallpaper. The second chapter includes a fascinating discussion of Oliver Wendell Holmes' essays on stereography, as well as thoughts from other writ-

Printed on plain paper, the view reproductions are sharp but some are a bit muddy, with the exception of the 14 fine reproductions in a full color section. Among the latter are some exceptional examples by Stoddard and Weller, along with Michael Burr's tinted "The Swing." Considering the fact that the author is an art history professor, the occasional appearance of academic jargon is natural and doesn't interfere with the flow of thought. (In 250 pages, I felt challenged to look up three words.) Women's Views is a major contribution to the study of both U.S. Women's history and narrative stereographs.

Playing for Keeps

'm not much of a vintage stereo view collector. I have a handful of antique stereo cards, mostly those representing a place or event of significance to me personally. But, I am an avid 3-D

photographer, and I'm always interested in obtaining images from other photographers whose work I

The Society and Beyond

The Stereoscopic Society of America and the Wider, Deeper World of Today's Stereographers by David Kuntz

admire. That's why I joined the Amateur Photographic Exchange Club (APEC) about two years ago. Unlike the SSA folios, with APEC exchanges I get to keep all the views I receive from other members. This has enabled me to start building a library of some wonderful views.

APEC actually has a very long and illustrious history. Tom Dory, the current APEC coordinator, provides us some history of the exchange, and explains the current workings of the group:

In the United States, Henry T. Anthony, with two friends, F. F. Thompson and Charles Wagner Hull, organized the Amateur Photographic Exchange Club in November, 1861. Membership was purposefully kept small because each member was required to send every other member at least one stereoscopic photographic print six times a year at prescribed intervals.

APEC II began in 1975 and was originally called APEC 20th Century Version. John Waldsmith, Stereo World magazine editor at the time and NSA founder was an original member. This club spanned 24 view exchanges starting in 1975 and ending in 1981.

APEC III began in 1997 with exchanges of print stereo views occurring about four times a year. We are now up to exchange 73 over the past 18 years. In contrast to the slide and print circuits run by the National Stereoscopic Association (NSA) and other groups like the Stereoscopic Society of

> America (SSA), APEC III members keep and own the stereo views they receive with each exchange. APEC members are able see how other modern stereo photographs make their cards. Over

the years we have seen a wide variety of card styles. As an APEC III member you build a collection of modern stereo cards.

We exchange print stereographs in a classic Holmes, 3.5 by 7 inches format or a "cabinet format," which are the standard 7 inches wide, but 4 or 5 inches tall. Basically we accept any stereo print that can be viewed with a Holmes style stereoscope. Currently the exchange is held four times a vear. APEC III members make between 12 and 18 cards for each of the exchanges.

Our experience levels vary. We have accomplished professional photographers, award winning stereographers, and rank amateurs. Regardless of experience anyone willing to make an effort is welcome. We work to keep the club friendly and informal. No prizes, no rankings, no competitions.

Membership is free. We do have to cover the costs of printing and mounting the views we send in, and we cover our own postage each way. We use centralized mailing, which saves on postage. Everyone sends their package of views to the View Redistributor, Tom Dory in Arizona, who sorts the views, repackages them and mails them back to you.

If you'd like to join or if you'd like more information about the club send e-mail to Tom Dory, tdory@cox.net.

A recent APEC folio contained this bounty of views



A UFO for Affordable 3-D VR?

The explosion in panoramic imagery for Google Cardboard type viewing has recently been joined by consumer level cameras and apps for capturing these 360° images, labeled Virtual Reality but completely flat. Systems for capturing actual

stereoscopic panoramic videos have involved expensive arrays of cameras, but a new

NewViews

Current Information on Stereo Today by David Starkman & John Dennis

flying saucer shaped rig from Human Eyes Technologies, the Vuze camera, combines the images from four pairs of wide angle cameras into high definition 3-D VR footage and is anticipated to be priced at under \$1000.

The camera is scheduled for availability in August, and will include a combined selfie stick and tripod, virtual reality head-mounted goggles, and access to the Vuze Studio software suite. Special stitching software blends the four stereo images into what looks like a seamless panorama in 2-D but which shows some clear 3-D problems in the YouTube sample videos at http://tinyurl.com/jmgcyzd. According to FORTUNE online, Vuze

> video content will support all virtual reality platforms, including Google Cardboard, Samsung Gear VR,

Oculus Rift, Sony PlayStation VR, HTC Vive or any 3D-enabled device

If the challenging, on-the-fly 3-D stitching problems are solved, the Vuze could provide more amateur video content for lots of the VR platforms out there, and, with luck,



The four-sided UFO style Vuze camera, with four of its eight lenses visible.

inspire other firms to compete in a potential 3-D VR consumer market.

Speaking of VR, there's an interesting video review of the View-Master VR at http://tinyurl.com/jn9qf36.

This somewhat crude 360° YouTube video sample of Vuze camera footage shows it being held selfie style in a cave. The same method is seen even in open desert scenes, where it





could have been held on its tripod/stick a few inches above the photographer's head. (The photographer's shadow may of course remain visible in many situations.) 3-D stitching problems are evident in the background above the photographer.

3-D Tar Pits

Titans of the Ice Age 3D is playing 1 at the Los Angeles La Brea Tar Pits Museum. Journey to a world lost in time, buried in ice and ruled by giants. In this 3-D adventure, discover an icy world on the brink of extinction, where humans share the

From Titans of the Ice Age 3D, Giant Screen Films



frozen tundra with majestic beasts. Encounter some of the Earth's most awe-inspiring mammals, from sabertoothed cats and dire wolves to giant sloths and the iconic mammoths that lived 10,000 years before modern civilization.

> This film was released in IMAX theaters in 2013 and is also showing in digital museum theaters. See how these magnificent creatures became trapped in tar, preserved in time, and are being unearthed today. Discover the story of 'Zed," a near-complete Columbian mammoth that was found at the La Brea Tar Pits. Learn about one of the richest depositories of Ice Age

fossils, where Ice Age secrets come in all sizes, from great mammoths, to dire wolf skulls to a treasure trove of tiny microfossils. They are a record of what lived in La Brea 10,000-40,000 years ago and are clues to the environment and climate at the time. What we discover are links to ancient Ice Age Los Angeles and how climate change affects us today. The harsh and beautiful kingdom of the titans in the age of ice is narrated by Christopher Plummer. Check their website: www.tarpits.org/3d-theater

his column **depends** on readers for information. (We don't know everything!) Please send information or questions to David Starkman, NewViews Editor, 4049 Coogan Circle, Culver City, CA 90232. Email: reel3d@aol.com.

RealD+10

n November 4, 2005, Chicken Little ushered in the new age of 3-D films. Since 2005 over 200 feature films have been released in digital RealD 3-D. Chicken Little was the first digital 3-D cinema release, in 85 digital 3-D cinemas. There are now almost 30,000 RealD cinemas worldwide and over 40,000 total digital 3-D screens. The company was founded in 2003 and it's been a struggle for them from the beginning. They have had growth in China, but with the U.S. saturated and 3-D becoming less popular, they rebranded themselves as a Global visual technology company. On November 9th they announced that Rizvi Traverse Mgmt. LLC would be acquiring them for about \$551 million and taking the company private.

Blu-ray is also celebrating its tenth anniversary, and has proved to be the best way to bring 3-D to the home screen. Of course IMAX, which was formed in 1967, was bringing 3-D to us long before 2005. IMAX premiered their first large format film in 1970 and in 1985 their first 3-D film. We are Born of Stars was shown at EXPO '85 in Tsukuba, Japan. This was an 11 minute large-format anaglyph 3-D movie. We have come a long way in thirty years.

The Martian

 $T^{\textit{he Martian}} \text{ was a big hit in 3-D} \\ \text{and also opened in IMAX several}$ weeks after it's initial run. The real news is how well it performed in 3-D. For the initial domestic opening weekend, 3-D ticket sales accounted for 46% of the \$55 million. ReelD reported that their 3-D equipped theaters generated 42% of the total 3-D format, the highest ReelD percent for any release so far in 2015. The performance of The Martian follows a strong summer season which saw eight 3-D releases capture more than 40% of their opening weekend gross in 3-D dollars. These included Jurassic World (48%,) Terminator: Gennisys (45%,) San Andreas (44%) and Avengers: Age of Ultron (42%.)



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ANY IMAGES of Nevada City or Grass Valley, California. Mautz, 329 Bridge Way, Nevada City, CA 95959. cmautz@nccn.net.

BLACK HILLS Stereoviews from 1874-1880, and photographers. (Book in progress.) Also want any other Dakota, So. Dakota and No. Dakota photographs and stereos. Robert Kolbe, 1301 S Duluth Ave, Sioux Falls, SD 57105, (605) 360-0031

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O.S. LEELAND. Writer seeks images and information on South Dakota photographer O.S. Leeland. He produced stereos mainly in 1904. The mounts read "Leeland Art & Mfg. Co, Publishers, Mitchell, South Dakota." Cynthia Elyce Rubin, 8507 Giovana Court, Orlando, FL 32836, cynthiaelyce@earthlink.net.

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WHITE MOUNTAINS: Early photographic views and stereoviews of new Hampshire White Mountain and northern NH regions, 1850s-1890s wanted for my collection. Town views, main streets, bridges, homes, occupational, coaches, railroads, etc. E-mail images to dsundman@LittletonCoin.com, or send photocopies to David Sundman, President, Littleton Coin Company, 1309 Mt. Eustis Rd., Littleton, NH 03561-3735.

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Crinoline Stereo Book

(Continued from page 32)

for the extended petticoat that freed their legs also provided enough air for the flames to be kindled. Any lady who would try and succour a burning friend would in turn catch fire and perish. The number of deaths was so high that, in 1863. Queen Victoria herself wrote a letter to the Ladies of England, urging them to renounce that ridiculous and dangerous fashion. She was not obeyed, and Crinoline lived on for several more years. Fire was not the only hazard facing crinolined women: lightning was attracted to so much metal, while a strong gust of wind could blow a crinolined lady straight under the wheels of a carriage or off a cliff. On the other hand, Crinoline also saved lives and proved a good parachute when desperate women tried to jump off a bridge and a good buoy once they gently hit the water, the only drawback in that latter case being that they would often float upside down in a most ungraceful and undignified manner. Again, this was impossible—or at least too indecent—to illustrate for the stereoscope.

Whenever possible we have tried in our book to let the Victorians speak in their own words. It seemed only fair, as they were the ones who had to put up with the excesses of the fashion. The book however also examines the revival and modern uses of Crinoline with some comments by such fashion icons as Dame Vivienne Westwood and Dame Zandra Rhodes. As with the two former publications by the London Stereoscopic Company, the front of the slipcase features a lenticular conversion of a stereo pair by David Burder, while the book itself is richly illustrated, both with stereo images and numerous prints from the time.

Whether you are interested in vintage stereocards, in fashion—or the quirkiness of it, in social history, or in the Victorian era, we sincerely hope you will enjoy the entertainment and light learning we tried to provide in this book.

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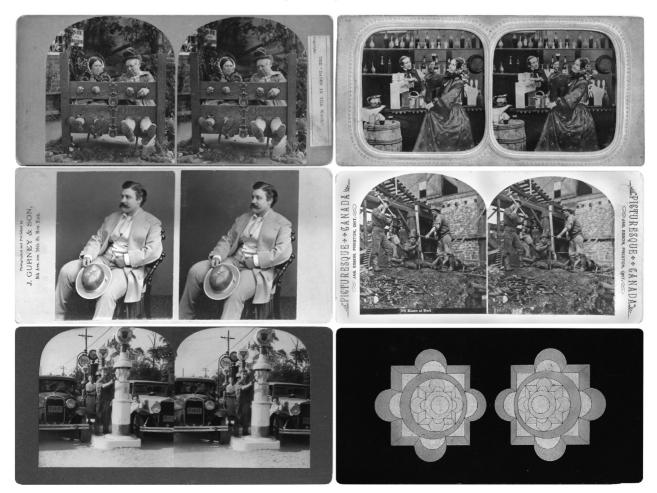
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